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62, 73

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1921

W. W. Tracy, Sr.

FEB 26 1921

Mingle's SEEDS

for

FARM and GARDEN

Clovers, Grass Seeds, Bulbs,
Roots, Plants and Flower Seeds

GARDEN TOOLS, POULTRY SUPPLIES,
POULTRY AND PIGEON FEEDS
FERTILIZERS

Eggs for Hatching and Little Chicks from Pure Bred Stock

P. B. MINGLE CO.

103 Market Street and 4 North Front Street
PHILADELPHIA, PA.

1837

84th Anniversary

1921

Mingle's Seeds

FOR SPRING SEEDING

SPECIAL NOTICE

Market Gardeners, Farmers' Clubs and Institutions wanting to purchase seeds in unusually large quantities should write for special prices. We have made prices very low in this catalogue yet when a number of bushels or pounds are wanted we can frequently supply at a lower price than by the single pound or bushel. In writing give us a list of quantities and varieties required and we will return list promptly with our lowest price for the lot.

Always remember that we can save you money, no matter where you live.

Write us about any seed you would like to know of and your letter will be answered the same day it is received. If you wish to know exactly what the freight or express would be on any article to your station, write us and we will tell you.

HOW TO ORDER AND REMIT—READ CAREFULLY.

The firm of P. B. Mingle Co. has been engaged in the seed business in the same building, No. 103 Market Street and No. 4 North Front Street, uninterruptedly since 1837, and is well known among its patrons as

**HEADQUARTERS FOR CLOVER, GRASS AND
VEGETABLE SEEDS—BULBS, ROOTS
AND PLANTS—POULTRY, FARM
AND GARDEN SUPPLIES.**

being one of the largest handlers in this State.

Strict, personal application to the details of so large a business has earned them a valuable reputation as thoroughly reliable seedsmen, whose representations as to the quality of the goods they offer can implicitly be relied upon.

TERMS OF SALE—Cash with order.

REMITTANCE—May be made by draft on New York or Philadelphia, postal money-order, check, or cash by Express or registered mail.

PERSONAL CHECKS from unknown patrons will be cashed before order is executed.

POSTAGE—We pay postage on 5c. and 10c. packets and ounces of Garden and flower seeds. Packages of 50 lbs. and under can be sent by parcel post. Postage in First Parcel Post zone (50 miles), is 5c. per lb., and 1c. extra for each additional pound. In Second Postal zone (100 miles), 5c. per lb., and 2c. extra for each additional

pound. When, owing to bulk or weight, seeds cannot be sent by mail, we deliver free to express or freight stations in Philadelphia, the purchaser paying all other transportation charges.

PROMPT ATTENTION—Anticipating the wishes of our customers, we give orders our prompt attention on the day they are received, and if for any reason, delay is unavoidable, we send prompt notice.

NON-WARRANTY OF SEEDS—It is a well-known fact that unfavorable weather (cold and wet, or hot and dry) has an unfavorable bearing on the germination of seeds, causing partial or complete failure of the crop; the seeds may be, and frequently are, destroyed by insects of various kinds; therefore, while we exercise the greatest care to have all seeds pure, reliable and true name, our seeds are sold without any warranty, express or implied, and without any responsibility on our part to results of crop. If the purchaser does not agree to these terms the seeds are at once to be returned to us.

ORDER EARLY—We are prepared to fill your orders as soon as this catalog reaches you, so please order early. You will aid us and get quicker service by doing this.

USE THE ORDER SHEET—We place an order sheet in each catalog. Please use same in ordering. It will aid us considerably in getting up your orders.

Space in this catalog will not permit description of every article we sell, therefore, if there be anything you wish in our line write us for prices, if we don't have it we will get it and if we can't get it, it is not made.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

CLOVER SEEDS

ALFALFA—Alfalfa is the most talked of and most widely planted of all the varieties of clover in the world.

The U. S. Department of Agriculture says: "In addition to the hay crop, Alfalfa at two years adds \$100 to the value of every acre on which it grows. There is no State in the Union in which Alfalfa cannot be successfully grown." This is saying a good deal but it has been proven true.

Alfalfa will produce 4 to 6 tons of hay to the acre each year and in money value is worth 45 per cent. more than other clovers and 60 per cent. more than Timothy hay. It will grow 4 crops a year and it does not exhaust the soil; it enriches the soil. Its long, branching roots penetrate far down, 15 to 20 feet, and so loosen the subsoil that it is a gigantic subsoiler, resists drought, and gets plant food where other crops would be a failure. When the plants are destroyed in order to raise other crops on Alfalfa Land, the large roots decay and produce a vast source of fertility to be used by following crops.

It is said that the feeding value of a ton of Alfalfa is equal to a ton of shelled corn.

Many other interesting facts might be given about Alfalfa. We can't say too much for it because it's a working plant which is changing the destiny of many farming sections. No farmer with stock can afford to let it go without trial.

Although fall sowing is preferable, good results can be obtained from early spring sowing. Give it care and attention, especially the first year, and your trial will show you that you cannot afford to be without it. Get it thoroughly established by first preparing your land, applying plenty of lime, and before seeding you should inoculate the seed. If your land has never had Alfalfa growing on it before be sure to inoculate the seed with nitrogen gathering bacteria for Alfalfa, for without inoculation your success is exceedingly doubtful. The Alfalfa bacteria, Mulford's Nitro Culture, is fully described on page 4.

When once established, Alfalfa is the most valuable permanent clover that can be grown. It is adapted to all parts of the United States and has the highest feeding value of any hay. Do not sow on wet ground, high and rather dry being preferable, and only cut when coming into bloom. Sow 20 lbs. per acre. Per bushel (60 lbs.) Market Price

ALSIKE CLOVER—Alsike Clover grows thicker and is finer in growth than Red Clover, making better hay and probably more and better grazing. It is also hardier, resisting extremes of heat and drought and also severely cold weather to a remarkable extent. It is perennial and does not winter kill. It succeeds on a variety of soils, light upland loamy lands as well as stiff bottom lands. It will do better on moist land than any other Clover. It is surer to give a good stand and make good crops than either the Red or Mammoth Clover, and in sections where these Clovers have been uncertain Alsike is superseding them altogether. When sown with other grasses it forms a quick undergrowth and greatly increases the yield. It is well adapted for sowing with Red Clover, Timothy, Herd's Grass, as it matures with these grasses, but flowering a little later than Red Clover.

Sow in the Spring or Fall at the rate of 12 lbs. per acre. Per bushel (60 lbs.) Market Price

CRIMSON OR SCARLET CLOVER—Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from 1½ to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, and should be sown in July, August or September of each year. As a manurial crop it is worth in fertilizer value thirty to forty dollars per acre. Sow at rate of 15 lbs. per acre. Per bushel (60 lbs.) Market Price

GRASS SEEDS

BLUE GRASS—Perennial. Height, 10 to 15 inches. This valuable grass is suited to a variety of soils, from an average dry one to moist meadows, and makes an excellent pasture grass, producing a most nourishing food for cattle, retaining its qualities till a late period in Winter and further South affording abundant food during the Winter. It is very productive, unusually early, and presents a beautiful green appearance in early Spring, while the other grasses are yet dormant. It makes a splendid lawn grass, when blended with other grasses. Sown by itself, either in Spring or Fall, 40 to 50 pounds per acre are required. Per bushel (14 lbs.) Market Price

TIMOTHY—Of Hay Grasses Timothy is one of the most popular, nutritious and salable. On clay or heavy loams, lowlands or in mountainous districts, provided there is an abundance of moisture, it produces the very best results. On sandy or light loamy ground it does not do so well as Orchard, Tall Meadow Oat or Red Top Grass. If grazed or cut too close, the stand of Timothy will be seriously injured, besides it does not form as good grazing as many other grasses. The yield of hay is from 1½ to 3 tons per acre. Timothy requires good land to make good crops. It does not root as deeply and is not considered as much an improver as other grasses, consequently should not be sown on land deficient in humus or vegetable matter nor on soils of a light or sandy nature. Clovers grow well

MAMMOTH, SAPLING OR PEA VINE CLOVER—This is similar to Medium or Common Red Clover both in the appearance of the seed and its habit of growth, the difference being that it usually grows larger and is later maturing. It is considered superior as an improver on account of the extra growth. It is a good variety for thin soils, or to seed with Timothy, meadow Fescue or Herds Grass or Red Top, as it matures about the same time as these grasses. Is best adapted for ploughing under as green manure; it grows five or six feet high, has large, coarse stalks, which are not liked by cattle. It is not ready to cut for hay until long after the common variety, and when cut leaves the ground bare, making no second growth. Sow about 12 lbs. per acre, if sown alone; or with Timothy sow 6 lbs. of the clover and 8 lbs. of Timothy, which should make a liberal seeding. Per bushel (60 lbs.) Market Price

MEDIUM, OR COMMON RED—This is the most important of all varieties of Clover for practical farm purposes; makes excellent pasturage, and fine hay crops when sown with Timothy, Orchard and other grasses, as the latter ripen about the same time. It is one of the best fodders for milch cows or sheep, and improves the land by adding humus to the soil.

It is a perennial, growing to a height of 1½ to 2 feet, yields crops several years from one seeding, and on good land, yields two to three cuttings annually. It should be cut for hay when in full bloom.

Sown by itself sow, either in Fall (July 1st to Sept. 5th) or in Spring (Feb. 1st to April 15th) at the rate of twelve to fifteen pounds per acre, according to nature of the soil. Per bushel (60 lbs.) Market Price

WHITE BLOSSOM, SWEET CLOVER OR BOKHARA—Is a hardy biennial plant of an erect and branching habit.

It starts up early in the Spring and in its second year it reaches a height of from 5 to 12 feet, blooms, matures its seed and dies.

However, there is usually enough seed scattered to reseed, and the crop is continuous unless cut before seed ripens.

When young it resembles Alfalfa. Sweet Clover has a peculiar bitter taste. The flowers and leaves possess an odor like vanilla. It is an excellent bee food. Grows well in all climates and soils, whether gravel, clay or sand.

Stands droughty weather equally as well as alfalfa, yet will grow in wet places.

Is a deep rooting legume, storing up Nitrogen like Cow Peas, thus possessing great fertilizing properties. Two crops can be cut in a season. It is a good silo feed.

Sow in Fall or Spring, 15 to 20 lbs. per acre. Per bushel (60 lbs.) Market Price

YELLOW ANNUAL SWEET—This being only an annual and much smaller in growth, is not so desirable. To be sown early in Spring at rate of 25 lbs. per acre. Per bushel (60 lbs.) Market Price

WHITE DUTCH CLOVER—A small, low growing variety, with creeping stems; mixed with Blue grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. It is very largely used in lawn and pasturage mixtures, and is indigenous to the soils throughout this section. It makes a small, close, compact growth, covering the ground like a carpet. Succeeds and does well all throughout the North. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow either in the Spring or Fall. When sown by itself, sow at the rate of ten lbs. per acre. It is better, however, sown in mixture with other grasses. Per bushel (60 lbs.) Market Price

with Timothy and aid it by supplying nitrogen. Timothy alone a peck (11 lbs.) to the acre or with Clover 10 lbs. Timothy and 6 lbs. Clover. A splendid mixture is 8 lbs. Timothy, 6 lbs. Clover (either Mammoth Clover or Alsike Clover preferred, as they mature at the same time as Timothy), 6 lbs. Fancy Red Top, ½ bu. Meadow Fescue. Together these will produce most excellent hay, also nutritious and abundant pasture in good loamy clay or low ground soils; 8 lbs. Timothy and 6 lbs. Clover when sown together. Per bushel (45 lbs.) Market Price

CREeping BENT—This grass somewhat resembles the Herds or Red Top Grass in appearance and growth, and is considered by many as equal to or superior to the latter. Is excellent for moist locations. It has creeping roots holding tenaciously to the soil, and is therefore valuable in lawn mixtures, resisting tramping.

When sown alone use 25 to 30 lbs. per acre. Per bushel (16 lbs.) Market Price

EMBANKMENT GRASS—This mixture is intended for terraces, slopes and railway embankments, and is made up of the best soil binding as well as slender rooted varieties, to secure a rich green and substantial turf. Per bushel (15 lbs.) Market Price

GREEN GRASS—This is the grass "par excellence" for lawns, making a fine close surface of dark green velvety color. It is very sensitive to good treatment, and will in most cases drive out the other grasses and take possession of the soil. Should be sown not less than two bushels per acre. Per bushel (15 lbs.) Market Price

HARD FESCUE—A sub-variety of Sheep's Fescue, growing about 2 feet high. It is a small, even, tuft-forming grass with narrow blades and still finer bottom leaves of a deep green color. It thrives on both medium and light soils, and is frequently used in lawn mixtures. Per bushel (12 lbs.) Market Price

HERD OR RED TOP GRASS—A permanent and very hardy native perennial grass, succeeding best on moist land, making a good pasture when fed close; is valuable for low, wet meadows, producing large crops of good hay. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is, perhaps, the most permanent grass we have. It remains green for the greater part of the year; sown with Timothy and Red Clover, its stems form a very close matting turf, not affected by trampling, and of fair quality when not allowed to go to seed. Sow $1\frac{1}{2}$ to 2 bushels per acre. Per bushel (10 lbs.) Market Price

HERD OR RED TOP—Fancy Recleaned—This is the pure seed of Herd or Red Top with the lighter seeds and chaff screened out, and therefore sells at a much higher price. We furnish extra clean stock only. Per bushel (32 lbs.) Market Price

ITALIAN RYE GRASS—When sown alone early in Spring it thrives quickly and can be mowed twice the same year and produces fine fodder. The Italian Rye Grass, being an annual, is preferable to the Perennial, where a one year's stand only is required, but if the field is to stand over the second year we would prefer the Perennial, as it is stronger, but, on the other hand, the Italian gives larger yields, and is less hard and wiry. Per bushel (20 lbs.) Market Price

MILLET—GOLDEN MILLET—A much improved variety, medium early, growing three to five feet high; the heads are closely condensed, though the spikes are very numerous. It is an enormous cropper; should be sown not less than one bushel per acre, if less will grow coarse and woody, in which state it is not relished by cattle. Millet is somewhat difficult to cure, and if it can be matured early enough to get the warm sun of August or September, it will be a decided advantage, but sixty days is usually long enough to grow it for hay. It should be cut for hay as soon as it comes into blossom.

It must be remembered that Tennessee German Millet is the best in the world, being sown and cultivated for seed and compared with seed grown elsewhere the Tennessee grown is purer and better in every way.

Sow one to one and a quarter bushel per acre. Per bushel (50 lbs.) Market Price

SUDAN GRASS—A forage grass of great possibilities. This grass possesses all the good qualities of Johnson Grass, but minus the bad feature of Johnson Grass, whose roots spread out from year to year, becoming a nuisance.

Sudan Grass is an annual and must be seeded each year. This makes it fit nicely into any system of rotation, and while it does not benefit the soil like legumes, it does afford changes in crops. It does not injure the ground.

Sudan Grass is tall, reaching a height of 7 to 9 feet. The stems are small, rarely thicker than a lead pencil. The plant stools wonderfully, sometimes producing as many as a hundred stalks from one root.

Yields a fine crop of hay of first class quality; all stock greatly relish and thrive on it. It yields under favorable conditions about 4 tons per acre.

Seeding time for Sudan Grass is when soil has become warm in Spring, about May 1st being a good time in this latitude.

Can be sown in drills, rows or broadcast. For sowing in drills or broadcast, 16 to 24 lbs. per acre. If seeded in rows 36 in. to 42 in. apart, 2 to 3 lbs. per acre. When put in rows should be cultivated like corn. Per lb.

MILLET—HUNGARIAN—This belongs to the millet family, growing less rank, with small stalks often yielding two to three tons of hay per acre; like millet it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow one bushel per acre and cultivate like millet; all kinds of stock eat it with avidity. Per bushel (48 lbs.) Market Price

MILLET—JAPANESE, OR BARNYARD—Frequently called the Billion Dollar Grass. An excellent fodder plant, growing from 6 to 8 feet high, producing 12 to 20 tons of hay per acre.

It is more tender than most tall varieties of millet. Sow from May 15 to end of July. If broadcast, only 12 lbs. per acre; if drilled, 8 lbs., as it is a remarkable stooler.

It makes fine hay or green fodder, and is much relished by horses and cattle. Per bushel (32 lbs.) Market Price

ORCHARD GRASS—A most valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the Spring two weeks earlier than most grasses, and when fed off is again ready for grazing in a week, and the last in the Fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. It is palatable and nutritious and stock eat it readily when green; it will also withstand severe drought, keeping green where many grasses wither, and will endure considerable shade as in orchards and groves.

Sow $1\frac{1}{2}$ to 2 bushels per acre. Per bushel (12 lbs.) Market Price

PASTURE GRASS SEED (for permanent pastures)—Having given our attention to grasses for this purpose for many years, and after practical results and experience, we have succeeded in creating a mixture which we can highly recommend.

If there is any land you wish to set in permanent pasture, we can supply you with a mixture of any description required or a special mixture admirably suited for this purpose at a very reasonable cost. We are headquarters for all kinds of grass seeds and can save you money on your purchases. Of the ingredients in it, the Timothy and the Clovers come right along and give some feed the year of sowing and a good deal of it the next year, while it isn't till that year that the Blue Grass begins to show. But where the Red Clover begins to disappear and the Timothy gets thin the Blue Grass is just setting up in business and the other grasses are not missed. And when established the Blue Grass is a stayer, and it and the White Clover, which also sticks, makes a combination that is all right.

Sow $2\frac{1}{2}$ to 3 bushels per acre. Per bushel (15 lbs.) Market Price.

PERENNIAL RYE GRASS (or English Rye Grass)—A nutritious permanent grass for meadows and pasture, or for mixing with other grasses for lawns. Does well on sloping banks, as its roots are fibrous and mat-like. Is especially adapted for pastures, as it will endure close cropping, and is one of strong, quick and successive aftergrowth. It produces an abundance of foliage which remains bright and green throughout the season, and for this reason is also much used for lawn grass mixtures. It is also well adapted for permanent meadows, and yields large quantities of very nutritious hay, which is well liked by all kinds of stock. Does well on almost any land, but prefers rich or moist soil, such as will produce a good corn crop. Should be sown in the Spring in quantities of one and a half to two bushels per acre. Per bushel (20 lbs.) Market Price.

RED FESCUE—A partly creeping, partly tuft-forming bottom grass, with sparse, narrow blades, useful for both grazing and hay-making purposes. It thrives on all soils, even on dry sandy bottoms, and forms a rather thickly covered turf, leaving very little room for weeds to come through. It is one of the earliest grasses, and comes to the front at a time when young fodder is most looked for. It is useful in small proportion in mixtures for permanent pastures on heavy soils. Its dark-green narrow blades make it useful grass for lawns under shade. Per bushel (12 lbs.) Market Price.

RHODE ISLAND BENT—A creeping variety, but more tuft-forming than the Creeping Bent, and not quite so productive in fertile stems and foliage. Answers very well in lighter soils, but, unlike the Creeping Bent, it has a tendency to get hard and strawy, and when in this condition is not relished by cattle. It should be cut just before or during bloom. Sow 4 bushels per acre. Per bushel (12 lbs.) Market Price.

SHEEP'S FESCUE—A densely tuft-forming perennial grass, deep-rooted and growing 20 to 25 inches high, with very little small bottom and stalk-forming foliage. Grows well on both medium and light sandy soils, having a preference for the latter. It is of medium maturity, but secondary only in regard to yield and nutritive value.

It thrives in soils too light, or in want of sufficient rainfall for other grasses to make a permanent pasture, and is extremely well adapted for sheep grazing, hence its name. It should be borne in mind, however, that Sheep's Fescue grows hard and strawy very soon, and for best results should be cut just before or when the plants are in bloom.

Sow 2 to 3 bushels per acre. Per bushel (16 lbs.) Market Price.

FIELD AND FORAGE SEEDS

BARLEY—SIX-ROWED—Finest sort for growing in Pennsylvania or New Jersey. Makes a good stiff straw, standing up well. Is the earliest among the beardless varieties, making a quick-growing crop of excellent and nutritious green fodder, and is growing in popularity wherever used, and will also make a good grain crop, although its principal value is as an early nutritious forage crop, to feed green or to cure as hay. If for the latter, it should be cut when in the milky state.

Sow $2\frac{1}{2}$ bushels per acre. Per bushel (48 lbs.) Market Price.

BROOM CORN—EARLY EVERGREEN—This variety is the most popular to sow for market. It is a very bright green

color. Makes by far the best brooms of any corn grown, and commands the very highest prices. Height, 7 to 8 feet.

Sow in drills 12 lbs. per acre, or if in rows 8 to 10 lbs. per acre. Per bushel (46 lbs.) Market Price.

BUCKWHEAT—SILVER HULL—This variety has a large, plump, silvery grain. The plant continues to bloom longer than common Buckwheat, thus producing a larger crop. Per bushel (48 lbs.) Market Price.

BUCKWHEAT (Japanese)—This variety of Buckwheat is a great improvement over the old kind in the following respects: The new Japanese grows with astonishing vigor and begins to mature its grains in about fifty days, its extreme earliness

insuring safety from frosts, where the other kinds often get caught. 2d. A most valuable quality is its ability to withstand wind-storms and not lodge. 3d. It holds its grain in harvesting. It has been known to stand uncut a month after its proper time for ripening, and without apparent loss from lodging or grains separating. 4th. In yield it excels, one peck yielding from 36 to 52 bushels. Its flour is the whitest and finest of all Buckwheat. 5th. It will do well on soil too rich or too poor to support the old varieties. 6th. It will withstand sunblight almost perfectly.

Sow one bushel per acre. Per bushel (48 lbs.) Market Price.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

CANADA FIELD PEAS

Here is a crop which is not only profitable, but will return to the land the much needed nitrogen. Peas are second only to Clover in their soil enriching properties and can be grown under almost any condition of soil or climate. There is always a ready market for Peas, or they can be profitably ground and fed to the stock. The vines make rich, nutritious hay. If fed to milch cows, when in a green state, pods, vines and all, the flow of milk will be almost doubled.

Peas are a paying crop, and can be profitably planted in many ways.

First. When sown alone about three bushels are required to the acre. They can be matured and threshed when dry. The yield will vary from 30 to 60 bushels an acre.

Second. Peas and Oats are frequently sown together, using $1\frac{1}{2}$ bushels of Peas and 2 bushels of Oats an acre. By so doing a double crop can be secured. They can be threshed at one time and readily separated in cleaning.

Third. They can be sown alone or with Oats and fed green. It is surprising the amount of fodder which is produced in this way. If sown together, the Peas should be sown first and plowed under about four inches deep, the Oats may then be drilled in.

Fourth. For plowing under when Peas and Oats are sown together and each are "in milk" they are nearly equal in value to Clover, used in the same way to enrich the soil. Sown in January, February or early March. Per bushel (60 lbs.) Market Price

COW PEAS—The Southern Cow Pea (in reality a bean) has been cultivated in the South for many years, but only in recent years has it been demonstrated that most all varieties are adapted to cultivation throughout the entire United States. They now are one of our most valuable farm products.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom; they will grow on land that will not produce clover.

As a fertilizer crop it excels all others, absorbing from the air more nitrogen than clover, and drawing from the subsoil large amounts of potash and phosphoric acid, depositing these fertilizer elements in the surface soil, just where needed for succeeding crops.

Cow peas afford excellent midsummer pasturage, but the best way for using green is to cut and feed to stock. Sow $1\frac{1}{2}$ to 2 bushels per acre broadcast.

BLACK—A standard trailing variety; and very extensively grown. Very prolific; early to mature; somewhat later than Whippoorwill. Makes a fine growth of foliage. Per bushel (60 lbs.) Market Price

BLACK-EYE—(Black-eyed Susan, or Sand Pea)—Later than Whippoorwill. Vines erect. Fodder long. An excellent soil improver. Similar in growth of vine and action of roots upon the soil as the other Cow Peas. Per bushel (60 lbs.) Market Price

GRAY CROWDER, OR IMPROVED WHIPPOORWILL—Very early in maturity. The vines are not runners, but grow erect in bunches. The seed is brown speckled. Per bushel (60 lbs.) Market Price

NEW ERA—Upright in growth, quicker to mature than Whippoorwill, prolific in peas. The vines make a large growth, cure easily, and make fine, dry forage. The seeds are of a dull red color, and, being smaller than ordinary Cow Peas, less seed is required to sow an acre, 1 to $1\frac{1}{2}$ bushels being ample. Per bushel (60 lbs.) Market Price

WHIPPOORWILL—An early erect-growing bunch variety. The seed is brown speckled and more easily gathered than from the vine-growing sorts. Early in maturity and habit of growth. Good between corn. Per bushel (60 lbs.) Market Price

VETCH—SPRING—(Vicia Sativa)—Culture same as for peas. Valuable as a cover crop. Sow 2 bushels per acre. It is quicker in growth than Winter Vetch, and makes a splendid forage and hay crop, and is an excellent soil improver. When sown with barley or oats use 1 bushel to 30 lbs. Spring Vetch to the acre. (60 lbs. per bushel) Market Price

VETCH—WINTER—(Vicia Villosa, Sand or Hairy Vetch)—Sand-Vetch is a very valuable forage plant and is rapidly becoming extremely popular as year after year the farmers of this country are learning more of its true value. It is noted for its extreme hardiness, is highly valuable in the North as a Winter cover crop to prevent leaching; is also valuable for forage and fertilizing purposes. It withstands hard Winters, being harder than wheat. It is an annual, but drops its seed freely and will come up year after year on the same ground. It belongs to the pea family, but the vines are nearly twice as long and leafy as peas. It may be sown in the Spring or Fall with any crop of grain. It remains green all Winter and is valuable for early pasturing as well as for fertilizing. It is extremely early and has enormous value for feeding purposes. Drought, heat and cold do not affect it. It is eagerly eaten by all kinds of stock.

If sown in April or early May it can be cut in July. Yields 12 to 20 tons green fodder to the acre. Sow $\frac{1}{2}$ bushel per acre. Per bushel (60 lbs.) Market Price

WHEAT—We carry a full line of all the principal varieties of Seed Wheat when in season. Our stock is all re-cleaned on our own premises, and customers can rely upon us to furnish the best and cleanest stock, true to name. Among the sorts offered are Fulcaster, Fultz, Longberry, Miracle, St. Louis Prize and others. Per bushel (60 lbs.) Market Price

FLAX—Farmers should not lose sight of the fact that Flax can be raised where Wheat is raised, and where tried has brought better returns for the amount of labor expended than Wheat.

Sow 30 to 40 lbs. per acre. Per bushel (56 lbs.) Market Price

HEMP—This is a crop that deserves more attention. The fibre is in demand in all markets, and the seed can be marketed for feed.

Sow 1 to $1\frac{1}{2}$ bushels per acre broadcast, or $\frac{1}{2}$ bushel in drills.

Per bushel (40 lbs.) Market Price

SORGHUM—Early Amber—The earliest in cultivation, black hulled, most suitable for hay; is a great hog feed. Sow from April to July at rate of 1 bushel per acre broadcast. In drills, 8 to 12 lbs. Per bushel (50 lbs.) Market Price

SOJA BEAN—Mammoth Yellow—Well adapted for improving poor soils. Is an immense yielder of excellent fodder relished by all cattle. Sow May 15th to June 15th. One-half bushel per acre in drills two and one-half feet apart. Per bushel (60 lbs.) Market Price

SOJA BEAN—BLACK WILSON—An excellent variety for Middle and Eastern States. Grows 36 to 44 inches high, branches well, holds leaves and the seeds do not shatter from pods after cutting. In Delaware it matured in 115 days, and the plants held the seed well. Per bushel (60 lbs.) Market Price

KAFFIR CORN—Is becoming more valuable every year because of its drought resisting qualities. Grows 4 to 5 feet high, is very stocky and leafy; valuable alike for forage and grain. Plant from March to July, in rows 3 feet apart, drilling seed thinly like sorghum. If wanted for grain, principally, let heads mature on the stalk and then the whole stalk may be cut for fodder after the seed heads have been cut. If wanted for fodder, mainly, cut down the stalks when first seed heads begin to appear, leaving 4 to 5 inches of stubble. From this stubble will spring a second growth, making an excellent crop of forage and a fair crop of grain. Stalks keep green and juicy to the last. For poultry feed and small grain it is unexcelled.

Sow 5 lbs. per acre in rows 3 feet apart and cultivate same as corn. For fodder 1 to $1\frac{1}{2}$ bushels per acre broadcast or in drills. Per bushel (50 lbs.) Market Price

OATS—WELCOME—Very plump, heavy grain, and close husks. In favorable seasons they will weigh from 40 to 45 lbs. per bushel. This variety grows from 5 to 6 feet high in rich soil and cool locations. The heads branch freely on all sides, and are from 16 to 22 inches in length. The straw is straight.

This variety is well suited to the climate of Pennsylvania and New Jersey. In warmer localities it will not produce so heavily, nor make such heavy grain. It is early in maturity, ripening one week ahead of other sorts. It will yield good crops where other varieties cannot be grown profitably. Per bushel (32 lbs.) Market Price

ONION SETS—(See page 18)

RAPE—DWARF ESSEX—This plant is one of the most valuable forage crops ever introduced into this country and is highly recommended for succulent forage from early Spring to the Winter months. For sheep, swine or poultry it is unexcelled. The feeding value is very high; it is a great fattener.

This seed may be sown in many ways to suit conditions existing in various locations. It may be sown in early spring, or after the soil has produced an early maturing forage crop, or just before the last cultivation of corn. An acre of rape will be ready to pasture in six weeks from time of sowing.

Sow 3 lbs. to an acre in rows $2\frac{1}{2}$ feet apart, or broadcast at rate of 6 lbs. to one acre. Our stock is the genuine Dwarf Essex and not the worthless annual. Per 1 lb. () ; per bushel (50 lbs.) price on application.

RYE—SPRING—This article has proved itself a good cropper and straw producer. It has come to stay. The growth is as tall as the Winter variety. It requires $1\frac{1}{2}$ to 2 bushels per acre, and the seed product being 20 to 25 bushels per acre. A great many people use it in preference to Winter rye, and think it pays better than oats. District from the Winter rye, grain of finer quality and more productive; and can be successfully grown in any latitude. It is now being largely sown in the North in the place of oats, being a more profitable crop on account of the production of nearly four times the straw. Per bushel (56 lbs.) Market Price

RYE—WINTER—This is one of the most important of farm crops. In the first place it is a sure crop, failures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the Fall, and as it grows very vigorously, will furnish pasture till late in the Fall, and also early in the Spring, before other grasses have made a growth. So it is of great value to dairy farmers. If sown early in the Spring it makes an early and abundant pasture, but it makes no grain crop. Grown for the grain alone it will yield good returns. It is a good Spring soiling crop, giving the earliest bite of green stuff, makes fair hay if cut in bloom or before fully headed out. Useful also for a manuring crop if turned under in early Spring. Rye improves worn-out soils. Sow at last working of corn, or by itself from July to November, at the rate of $1\frac{1}{2}$ to 2 bushels per acre. Per bushels (56 lbs.) Market Price

MINGLE'S HIGH TEST CLOVER, TIMOTHY AND OTHER FARM SEEDS

For many years this firm has specialized in high grade re-cleaned seeds, maintaining a cleaning department for that purpose second to none.

We wish at this time to emphasize this point and to assure our old friends and all intending buyers that there will be no departure from the above rule.

There is an enormous amount of foul seed on the market, we wish to warn you

You don't want to sow buckhorn. It is a very troublesome weed and it is very common in Clover, and is not restricted to foreign seed only, but is found in American grown seed also

In some states it is a violation of the law to sell untested and uncleaned seed, so beware.

We are continually buying and re-cleaning Timothy Seed of the best Western grown, and we are in a position to sell the best and purest seed at lowest possible prices.

If you don't want buckhorn in your Clover, neither do you want plantain, sorrel or pepper grass in your Timothy.

We are always willing to quote and submit samples.

Prices on all seeds are subject to market changes.

For a Rich Velvety Lawn, Sow Mingle's Finest Velvet Lawn Seed — Experience Has Proven That Mingle's Shaded Lawn Grass Meets All Requirements.

MINGLE'S FINEST VELVET LAWN GRASS— The making and keeping of a lawn depends largely upon the thorough preparation of the soil before the seed is sown, as a good soil foundation is one of the essentials. The soil should be well drained and the top soil should be worked to a depth of 4 to 6 inches and none of the sub-soil brought to the surface. Work it thoroughly with a fine steel rake or fine-toothed harrow, crossing and re-crossing to obtain as fine a tilth as possible. After sowing gently rake seed in, following with roller, in order to compact the soil around the seeds to promote better germination.

If grading is necessary to secure an even surface, first remove and afterwards replace the top soil after the grading is completed. Tree and shrub planting, and laying out flower beds, should be done first. Lawns properly cared for, well fertilized and kept closely mowed, will improve year after year. Weeds should be removed as far as practicable, before sowing. Lawn grass, to produce a succession of verdure, must naturally consist of a mixture of several grasses, as some are more luxuriant in the Spring, others in Summer, and others again in Autumn. A proper combination of these various sorts is required to create and maintain a perfect, carpet-like lawn, and such is MINGLE'S VELVET LAWN GRASS MIXTURE.

Sow 1 quart of seed for space 10 x 30 feet. Four to five bushels are required for one acre.

Per 1 quart, 30c. postpaid. By express or freight at purchaser's expense: 1 qt., 25c.; 2 qts., 45c.; 4 qts., 75c.; peck, \$1.35; bushel (20 lbs.), \$5.00.

TERRACE OR EMBANKMENT GRASS—We offer in this mixture a different blending of grasses which are more suitable for holding the soil and preventing washing from hard rains.

Per 1 quart, 30c. postpaid. By express or freight at purchaser's expense: 1 qt., 25c.; 2 qts., 45c.; 4 qts., 75c.; peck, \$1.35; bushel (20 lbs.), \$5.00.

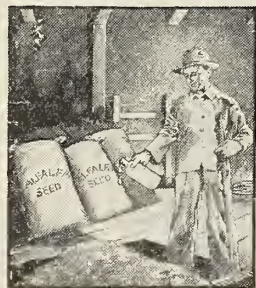
SHADY LAWN GRASS—On many lawns are bare spots under the shade trees. Such spots are frequently sour, perhaps covered with a green scum or moss. In such cases apply hydrated lime, which is powdered fine, at the rate of one bushel per thousand square feet, removing all moss or scum first and then loosening the soil in same manner as already prescribed for regular lawn making. Our mixture of grass seed for shaded spots is one best adapted to the requirements of much shaded lawns and will grow perfectly where ordinary grass mixtures would fail. Sowing instructions same as for Velvet Lawn Grass.



Per 1 quart, 30c. postpaid. By express or freight at purchaser's expense: 1 qt., 25c.; 2 qts., 45c.; 4 qts., 75c.; peck, \$1.35; bushel (20 lbs.), \$5.00.

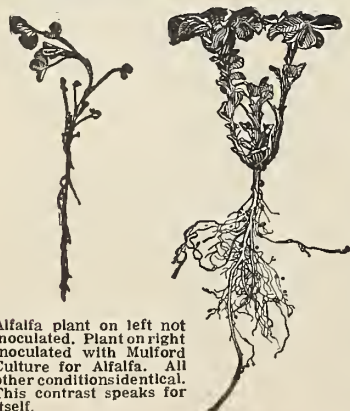
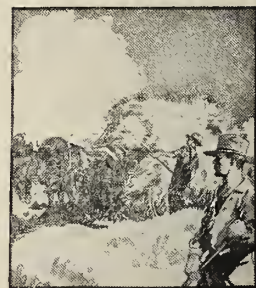
GOLF OR PUTTING GREENS MIXTURE—Our mixture of this grass is giving the best of satisfaction, being composed in proper proportions of the hardy and dense growing kinds best adapted for the purpose, standing heat and drought well and of deep rooting varieties which stand the wear and tear.

Per 1 quart, 30c. postpaid. By express or freight at purchaser's expense: 1 qt., 25c.; 2 qts., 45c.; 4 qts., 75c.; peck, \$1.35; bushel (20 lbs.), \$5.00.



Inoculate Your
Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches
and
Other Legume Crops
WITH
Mulford Cultures
FOR LEGUMES

Small Cost Large Returns Easy to Use No Labor Expense



Alfalfa plant on left not inoculated. Plant on right inoculated with Mulford Culture for Alfalfa. All other conditions identical. This contrast speaks for itself.

Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

Mulford Cultures are prepared for: ALFALFA, CRIMSON CLOVER, SWEET CLOVER, RED CLOVER, ALSIKE CLOVER, BURR CLOVER, COW PEAS, SOY BEANS, PEANUTS, VETCH, VELVET BEANS, SWEET PEAS, GARDEN PEAS, GARDEN BEANS, LIMA BEANS, LESPEDEZA, BEGGAR WEED and others.

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

PRICES: 5-Acre Size (A Dollar per Acre).....\$5.00
1-Acre Size.....1.50
1-4 Acre Size......75
Small Size (Supplied only in four varieties, for Garden Peas, Garden Beans, Lima Beans and Sweet Peas)......35

(These prices include delivery on freight shipments)

FREE DESCRIPTIVE FOLDER SENT UPON REQUEST

HANDY REFERENCE CALENDAR AND USEFUL TABLES

Handy reference calendar and useful tables for the Farmer, Home Gardener or Florist, which may help to solve quickly all problems in the sowing or planting of seeds or plants in each

month from February to October, and is fairly accurate for the latitude of Philadelphia.

FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
Sow in Hotbed Early Beans Broccoli Early Cabbage Forcing Carrot Early Celery Cucumber Eggplant Early Lettuce Parsley Pepper Radish Tomato	Sow in Hotbed Early Beans Early Beets Brussels Sprouts Early Cabbage Forcing Carrot Cauliflower Celery Eggplant Kohlrabi Beets Lettuce Parsley Pepper Radish Tomato In Open Ground Beans, B. Windsor Beets Carrot Leek Onion Peas Potatoes Radish Spinach Early Turnip	Sow in Hotbed Cucumber Eggplant Melon Pepper Tomato In Open Ground Asparagus English Beans Beets Brussels Sprouts Early Cabbage Carrot Cauliflower Celery Cress Cucumber Kohlrabi Leek Lettuce Melon Onion Parsley Parsnip Peas Potatoes Radish Spinach Early Turnip	In Open Ground Artichoke Asparagus Beans, Bush & Running Beets Brussels Sprouts Carrot Cauliflower Celery Sweet Corn Cress Cucumber Endive Kale Kohlrabi Leek Lettuce Melon Nasturtium Okra Early Peas Potatoes Pumpkin Radish Salsify Spinach Squash Herbs All Herbs	In Open Ground Beans, Lima & all other sorts Beets Broccoli Brussels Sprouts Late Cabbage Carrot Cauliflower Sweet Corn Cress Cucumber Endive Kale Kohlrabi Lettuce Melon Nasturtium Okra Early Peas Potatoes Pumpkin Radish Salsify Spinach Squash Herbs All Herbs	In Open Ground Beans Beets Carrot Sweet Corn Cress Cucumber Endive Kale Kohlrabi Lettuce Nasturtium Okra Early Peas Pumpkin Radish Spinach Squash White Fr. Turnip	In Open Ground Beans, Bush Tuberous Chervil Corn Salad Cucumber Endive Lettuce Welsh Onion Early Peas Radish Spinach Turnip Rutabaga	In Open Ground Cabbage for coldframes Cauliflower for coldframes Tuberous Chervil Corn Salad Cress Siberian Kale Lettuce Mustard Winter Radish Spinach Turnip Sweet Peas

Try the
Crimson Globe
Beet
this year
it is one
of the best.

A popular Potato
THE RED SKIN.
for planting late
in July, look on
page 20 for
description.

Quantity of Seed Usually Sown Upon an Acre.

Barley, broadcast	2 to 3 bushels
Beans, Dwarf, in drills	1½ bushels
Beans, pole, in hills	10 to 12 quarts
Beets in drills	5 to 6 pounds
Broom Corn, in hills	8 to 10 quarts
Buckwheat	1 bushel
Cabbage in beds, to transplant	¼ pound
Carrots, in drills	3 to 4 pounds
Corn, in hills	8 to 10 quarts
Corn, for Fodder	3 bushels
Cow Peas	½ to 2 bushels
Cucumber, in hills	2 pounds
Flax, broadcast	1½ bushels
Hemp	1½ bushels
Mustard, broadcast	½ bushel
Melon, Musk, in hills	2 to 3 pounds
Melon, Water, in hills	4 to 5 pounds
Mustard, broadcast	½ bushel
Oats, broadcast	2 to 3 bushels
Onion, in drills	5 to 6 pounds
Onion, for sets in drills	50 pounds
Onion sets, in drills	6 to 12 bushels
Parsnips, in drills	4 to 6 pounds
Peas, in drills	1½ bushels
Peas, broadcast	3 bushels
Potatoes, cut tubers	10 bushels
Pumpkin, in hills	4 to 6 pounds
Radish, in drills	8 to 10 pounds
Rye, broadcast	1½ to 2 bushels
Sage, in drills	8 to 10 pounds
Salsify, in drills	8 to 10 pounds
Spinach, in drills	10 to 12 pounds
Squash, bush varieties, in hills	4 to 6 pounds
Squash, running, in hills	3 to 4 pounds
Sugar Cane or Sorghum	10 to 12 pounds
Sudan Grass, broadcast	16 to 24 pounds
Sudan Grass, in rows	2 to 3 pounds
Tomato, to transplant	¼ pound
Turnip, in drills	½ to 2 pounds
Turnip, broadcast	3 to 4 pounds
Vetches, broadcast	30 pounds
Wheat, broadcast	1½ to 2 bushels

Grass Seeds to the Acre.

Red Clover	10 to 15 pounds
White Clover (Dutch)	10 pounds
Alfalfa or Lucerne	20 pounds
Alsike Clover	12 pounds
Sweet Clover, White Blossom	25 pounds
Sweet Clover, Yellow Annual	25 pounds
Crimson Clover	12 to 15 pounds
Timothy	12 pounds
Hungarian Grass	1 bushel
Pasture Grass	2½ to 3 bushels
Blue Grass	½ to 3 bushels
Rye Grass	1½ to 2 bushels
Orchard Grass	1½ to 2 bushels
Red Top Grass	1½ to 2 bushels
Mixed Lawn Grass	5 bushels
Millet	1 bushel

Table Showing the Weight of Various Articles.

Barley	per bushel	48 lbs.
Beans	per bushel	60 lbs.
Buckwheat	per bushel	48 lbs.
Broom Corn	per bushel	46 lbs.
Blue Grass	per bushel	14 lbs.
Clover Seed	per bushel	60 lbs.
Corn, shelled	per bushel	56 lbs.
Corn, on the ear	per bushel	70 lbs.
Flax Seed	per bushel	56 lbs.
Hemp Seed	per bushel	40 lbs.
Hungarian Grass Seed	per bushel	48 lbs.
Millet, Japanese	per bushel	30 lbs.
German Millet	per bushel	50 lbs.
Oats	per bushel	32 lbs.
Onion Sets	per bushel	32 lbs.
Orchard Grass	per bushel	12 lbs.
Perennial Rye Grass	per bushel	20 lbs.
Peas	per bushel	60 lbs.
Vetches	per bushel	60 lbs.
Red Top Grass Seed	per bushel	10 lbs.
Rye	per bushel	56 lbs.
Spinach	per bushel	40 lbs.
Timothy Seed	per bushel	45 lbs.
Top Onions	per bushel	28 lbs.
Turnips	per bushel	55 lbs.
Wheat	per bushel	60 lbs.

Number of Plants to the Acre.

Distance Apart	No. of Plants
1 foot by 1 foot	43,560
1½ foot by 1½ foot	19,360
2 feet by 1 foot	21,780
2 feet by 2 feet	10,890
2½ feet by 2½ feet	6,969
3 feet by 2 feet	7,260
3 feet by 3 feet	4,840
4 feet by 4 feet	2,178
5 feet by 5 feet	1,742
6 feet by 6 feet	1,210
8 feet by 8 feet	680
10 feet by 10 feet	435
12 feet by 12 feet	302
15 feet by 15 feet	193
18 feet by 18 feet	134
20 feet by 20 feet	109
25 feet by 25 feet	70
30 feet by 30 feet	48

Number of Plants Produced from an Ounce of Seed.

Plants	about
Asparagus	300
Broccoli	2,000
Cabbage	2,000
Cauliflower	2,000
Celery	3,000
Egg Plant	1,000
Endive	3,000
Kale	2,000
Leek	1,000
Lettuce	3,000
Pepper	2,000
Tomato	3,000
Sage	1,000
Thyme	5,000

HANDY REFERENCE CALENDAR AND USEFUL TABLES (Continued)

Time Required for Maturity of Different Garden Crops Reckoned from Day of Planting the Seed.

Beans—String	35 to 65 days
Beans—Shell	65 to 75 days
Beets—Table	65 days
Beets—Stock	150 days
Cabbage—Early	105 days
Cabbage—Late	150 days
Cauliflower	110 days
Corn	75 days
Egg Plant	150 to 160 days
Lettuce—Heading	65 days
Melon—Water	120 to 140 days
Melon—Musk	120 to 140 days
Onion	135 to 150 days
Pepper	140 to 150 days
Radish	30 to 40 days
Squash—Summer	60 to 65 days
Squash—Winter	125 days
Tomato	150 days
Turnip	60 to 70 days

Average Time Required for Garden Seed to Germinate.

Beans	5 to 10 da
Beets	7 to 10 da
Cabbage	5 to 10 da
Carrot	12 to 18 da
Cauliflower	5 to 10 da
Corn	5 to 8 da
Cucumber	6 to 10 da
Endive	5 to 10 da
Lettuce	6 to 8 da
Onion	7 to 10 da
Pea	6 to 10 da
Parsnips	10 to 20 da
Parsley	15 to 21 da
Peppers	9 to 14 da
Radish	3 to 6 da
Salsify	7 to 12 da
Tomato	6 to 12 da
Turnip	4 to 8 da

Average Amount of Seed and Number of Plants for One Acre.

Asparagus plants @ 4 x ½ ft.	5000	Cucumbers in hills @ 3 x 4 ft.	2 lbs.	Pepper plants, 2¼ x 1 ft.	17,500
Barley	2½ bush.	Cucumbers in drills	5 lbs.	Pumpkin in hills, 8 x 8 ft.	4 qts.
Beans, Bush, in drills @ 2½ ft.	1½ bush.	Egg Plant, plants, 3 x 2 ft.	5 oz.	Parsley in drills @ 2 ft.	5 lbs.
Beans, Pole, Lima, @ 4 x 4 ft.	15 qts.	Endive in drills @ 2½ ft.	4 lbs.	Peas in drills, short varieties	2 bus
Beans, Carolina, Prolific, etc., @ 4 x 3 ft.	10 qts.	Flax, broadcast	2 bush.	Peas in drills, tall varieties	1 to 1½ bus
Beets and Mangolds in drills, @ 2½ ft.	6 lbs.	Grass, Timothy with Clover	6 qts.	Peas in drills, broadcast	3 bus
Broom Corn in drills	12 lbs.	Grass, Timothy without Clover	8 qts.	Potatoes	10 bus
Cabbage sown in outdoor beds for transplanting	16 oz.	Grass, Orchard	24 lbs.	Radish in drills @ 2 ft.	6 lbs.
Cabbage sown in frames	8 oz.	Grass, Red Top or Herds	40 lbs.	Rye, broadcast	2 bus
Carrot in drills @ 2½ ft.	4 lbs.	Grass, Blue	40 lbs.	Rye, drilled	1½ bus
Celery seed	8 oz.	Grass, Rye	30 lbs.	Salsify in drills @ 2½ ft.	15 lbs.
Celery plants @ 4 x ½ ft.	25,000	Grass, Millet	32 qts.	Spinach, broadcast	30 lbs.
Clover, White Dutch	10 lbs.	Kale, German Greens	5 lbs.	Squash, Bush, in hills, 4 x 4 ft.	4 lbs.
Clover, Lucerne	10 lbs.	Lettuce in rows @ 2½ ft.	3 lbs.	Squash, Running, in hills 8 x 8 ft.	3 lbs.
Clover, Alsike	12 lbs.	Leek in rows @ 2½ ft.	4 lbs.	Sorghum in drills	5 to 6 qts.
Clover, Large Red with Timothy	6 qts.	Lawn Grass	100 lbs.	Turnips in drills @ 2 ft.	2 lbs.
Clover, Large Red without Timothy	10 to 15 lbs.	Melons, Water, in hills 8 x 8 ft.	4 lbs.	Turnips, broadcast	3 lbs.
Corn, Sugar	10 qts.	Melons, Citron, in hills 5 x 5 ft.	4 lbs.	Tomatoes in frame	2 oz.
Corn, Field	9 qts.	Oats	2 bush.	Tomatoes, seed in hills 4 x 4 ft.	8 oz.
Corn Salad in drills @ 10 in., large seed	25 lbs.	Okra in drills, 2½ x ¼ ft.	25 lbs.	Tomatoes, plants	3800
		Onion in beds for sets	50 lbs.	Wheat in drills	1¼ bus
		Onion in rows to make large bulbs	6 lbs.	Wheat, broadcast	2 bus
		Parsnips in drills @ 2½ ft.	10 lbs.		

Quantity of Seed to Sow a Single Row of 100 Yards

Asparagus	8 oz.	Cress	4 oz.	Parsley	2 oz.
Beans, Bush	3 qts.	Cucumber	4 oz.	Peas	3 qts.
Beans, Lima	3 pts.	Egg Plant	1 oz.	Pepper	1 oz.
Beans, Pole	3 pts.	Endive	2 oz.	Pumpkin	2 oz.
Beet	5 oz.	Kohl	2 oz.	Radish	6 oz.
Broccoli	1 oz.	Leek	2 oz.	Rhubarb	4 oz.
Brussels Sprouts	1 oz.	Lettuce	2 oz.	Salsify	4 oz.
Cabbage	2 oz.	Melon, Water	3 oz.	Spinach	6 oz.
Carrot	3 oz.	Melon, Citron	2 oz.	Squash	3 oz.
Cauliflower	½ oz.	Mustard	4 oz.	Tomato	1 oz.
Celery	3 oz.	Okra	12 oz.	Turnips	3 oz.
Collards	2 oz.	Onion (for large bulbs)	2 oz.	Turnip	3 oz.
Corn	1 pt.	Onion (for sets)	8 oz.		



For
Plants, Lawns
and
Vegetable Garden

WHAT HUMUS IS

Humus is decayed vegetable matter enriched and mellowed by age. Similar to a heavy leaf mould, it is richer by far, because of untold years of ripening in Nature's storehouse.

Humus acts on soil much as yeast does in bread, and by its process of aeration makes a heavy soil light, and likewise adds body to a light soil. Humus is black in color and rich in the elements of plant food—namely, nitrogen, phosphoric acid and potash, while its natural lime content, about 10 per cent., serves to sweeten the soil.

As a top dressing for lawns and for plants, shrubs, trees and general gardening Humus is unequalled; not merely as a quick

stimulant, but as a permanent soil builder. For growing fern various bulbs and plants it has no equal.

Humus will absorb several times its own weight in moisture and release it gradually; thus, when used on lawns, will carry the grass through periods of drought.

Our Humus analyzes as follows:

HUMUS.	Per Cent
Humus	41.25
Ammonia	4.32
Phosphoric Acid	0.73
Potash	1.23
Calcium Oxide	6.34
Equivalent to Calcium Carbonate	4.32
Silicates	4.11
Iron and Alumina	1.20
Moisture	25 to 50

Humus is clean and odorless, and contains no weed seed. Use it freely. Garden with it generally. One bag of Humus equal to a load of manure. A trial will convince.

PRICES ON HUMUS.

5 lbs., 20c.; 10 lbs., 35c.; 25 lbs., 60c.; 50 lbs., \$1.00; 100 lbs. \$1.50; 500 lbs., \$7.00.

Prices on car-load lots sent on request.

Prices F. O. B. Philadelphia.

We especially call attention to our complete Garden and Farm Tools, (pages 29 to 52).
We are outfitters for the Gardener.

ILLUSTRATED CATALOGUE

OF

VEGETABLE SEEDS

With General Directions for Cultivation

Terms of sale, etc., see second page of cover.

Prices in this catalog are subject to change without notice.

For quantities required per acre see tables, pages 5 and 6.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

ASPARAGUS

Culture—Soak the seed twenty-four hours in warm water, and sow in drills, one foot apart. When the plants are well up, thin to three or four inches in the row, and give frequent and thorough cultivation during the summer. The second season prepare a bed by deep spading or trenching, working in a large quantity of well-rotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of well-rotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up, gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well. The next season it may be cut for the table two or three times, taking care to cut all as fast as it appears. After the final cutting, spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season, and ever after that, the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer. The tops should not be cut until dead ripe.



Conover's Colossal

Conover's Colossal—A mammoth variety of vigorous growth, sending up from fifteen to forty sprouts from one to two inches in diameter. Color deep green and crown very close. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Columbian Mammoth White—Produces a very large pure white stalk. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Asparagus Roots—Conover's Colossal, Columbia White, Palmetto and Giant Argenteuil. 2-year roots, 75c. per 50; \$1.25 per 100; \$8.00 per 1000.



Stringless Green Pod Beans

Giant Stringless Green—This is a great improvement on the old time popular favorite Valentine Bean. The pods are fully one-third longer, averaging 5 to 6 inches in length; absolutely stringless, very crisp, round, full and fleshy. It is enormously productive, its handsome pods being ready for market a few days earlier than the old Valentine.

We confidently recommend it either for the home garden, canning or as a profitable variety to grow for market. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

Extra Early Red Valentine (Hopkins)—One of the earliest and most prolific round green podded beans. Comes into bearing earlier than the old stock of Valentines, is a wonderful producer and a perfect shipper. It will remain in a perfect condition for nearly two weeks after picking. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

Longfellow—Bears long green pods in profusion. Pods are of fine flavor and very tender, straight and fleshy. Pkt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

BEANS

DWARF OR BUSH

Culture—Beans do best on light, warm soils, but will do well on almost any kind of soil. They do not require heavy manuring. For earliest crop they should be planted after all danger of freezing is past. For a succession they should be planted every two weeks. Plant 2 or 3 inches apart. Hoe often, but never when vines are wet.

Green-Podded Varieties

Burpee's Stringless Green Pod—Forty days—Early and very productive, with fine pods, of best quality. Should be planted at intervals for a succession. Pods medium green, straight and round, tender, brittle, and of fine flavor. Pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

Black Valentine—A desirable sort for the market gardener, vigorous in growth, and of good quality. Pod long, round and slender. Produces long, round, straight, tender pods of blight resisting qualities. Pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

Our place of business (103 Market Street) is the *first* Seed and Bulb Store one sees in the morning and the *last* one at night from either Pennsylvania or Reading Ferries making the most convenient Seed Store for all concerned.

BEANS—Continued

INOCULATE THIS
SEED WITH
MULFORD CULTURE

Round Yellow Six Weeks—A round, green, podded Bean. Pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.

Late Refugees or thousand to one. A heavy-bearing, popular truckers' beans. Pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.00.



Improved Golden Wax Beans

strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods. Pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Round Pod Kidney Wax—An improvement on Wardwell's Kidney Wax. Pods long and straight, a heavy bearer of good quality. Pt., 30c.; qt., 55c.; 4 qts., \$1.85; peck, \$3.50.

Davis Kidney Wax—The King of flat Wax Beans. A beautiful form, handsome long pods, attractive color, luscious flavor, prolific yields, rust-proof, excellent shipper, making this grand bean a perfect success, seed white, height 14 inches. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Currie's Rust Proof Wax—Is the earliest to mature of either the green or wax beans. It is ready for market 25 days from date of planting. Its beautiful, pure golden, long, flat pods are of extra fine quality and are borne in abundance and attract the admiration of both the planter and the consumer. Entirely free from rust or blight. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Webber Wax—A new wax bean of distinct character. The vine is strong, holding pods well up, good bearer, yellow seed, round in shape, very meaty. This bean merits a trial. Pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Hodson Wax—A very sturdy grower, prolific; free from rust and blight. Vigorous plants are loaded with long handsome, straight pods, averaging 7 inches in length, color of a clear, light yellow, when picked young they are stringless. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Dwarf Beans for Shelling (Winter use)

Dwarf Horticultural or Cherry Bean—A crop of these beans has never failed to pay. This is a broad, long, flat, meaty bean, very productive, delicious flavor. It also makes a fine dried beans are large. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.85; peck, \$3.25.

Royal Dwarf White Kidney—Forty days—One of the best late kinds; seed white, kidney-shaped; as a winter bean for shelling it has no superior. Pt., 25c.; qt., 40c.; 4 qts., \$1.50; peck, \$2.75.

Large White Marrow—Excellent quality, either shelled green or dry. Pt., 25c.; qt., 40c.; 4 qts., \$1.50; peck, \$2.75.

Dwarf, White Navy—Seeds small, round and oval; used exclusively for field culture. Pt., 25c.; qt., 40c.; 4 qts., \$1.50; peck, \$2.75.

Wax Podded Varieties

Improved Golden Wax Bean—Thirty-five days—This bean has long been and still continues the standard wax variety for general use, and where many varieties have been introduced claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small white blossoms; pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purple red. Pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Wardwell's Kidney Wax—The vines of this variety are very large,

strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods. Pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

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Hodson Wax—A very sturdy grower, prolific; free from rust and blight. Vigorous plants are loaded with long handsome, straight pods, averaging 7 inches in length, color of a clear, light yellow, when picked young they are stringless. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.25.

Pole or Running

Culture—These are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varieties. After settled warm weather, set poles four to eight feet long, rows north and south four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of 30 degrees. Set in this way, the vines climb better, bear earlier and the pods are straighter and more easily seen. Around each hill plant five to eight beans, two inches deep. When well started, thin to four plants, and start any that fail to climb around the pole in the same way as the others, for they will not grow well otherwise.

White Dutch Case Knife—Seventy-five days—The earliest variety of Pole Bean, excellent flavor, and good green or dry seed broad, white, flat; can be used as a Snapshot or Lima when dry. Pt., 25c.; qt., 50c.; 4 qts., \$1.85; peck, \$3.50.

Kentucky Wonder—One of the earliest of the green podded pole beans; pods growing in clusters, light green in color and stringless, tender and melting when cooked. Pt., 25c.; qt., 45c.; 4 qts., \$1.75; peck, \$3.25.

Horticultural—Eighty days—The favorite, used green or dry. The dry beans are very superior for cooking. Pt., 25c.; qt., 50c.; 4 qts., \$1.85; peck, \$3.50.

Lazywife—A very productive sort, of fine quality. Pods are thick, broad and fleshy, about five inches long, growing in clusters, stringless when young. The dry beans are white, and use as a shell bean in winter. Pt., 25c.; qt., 50c.; 4 qts., \$1.85; peck, \$3.50.

POLE LIMA BEANS

Improved Extra Jersey Lima—Ninety days—Very superior quality, white seed much larger than the ordinary Lima, of greenish tinge; tender and sweet. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

Ford's Mammoth Extra Large Lima Beans. Its pods are large in size, containing from 3 to 8 Beans. They are unsurpassed in quality and productiveness. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

Salem County Improved Large Lima—Ninety days—A favorite table variety, very prolific; pods borne in clusters, with five or six large beans in the pod. Far superior to other Pole Limas. Ripens early and bears unfrost. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

Dreer's Pole Lima—Early and most prolific than Large Lima. Beans small extra quality. Pt., 30c.; qt., 60c.; qts., \$2.25; peck, \$4.00.

Shotwell's Improved Thick Pole Lima—A well-known favorite introduced from New Jersey. Beans thick and large. A decided improvement on Dreer's Improved Lima in quality, earliness and productiveness. Highly recommended by all who have tried it. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

King of the Garden Lima—One of the best Pole Beans for use, shell either green or dry. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

Challenger Lima—A very productive sort, maturing somewhat later than the flat varieties. The pods are produced in clusters and average 3 to 4 inches in length, containing 3 to 4 thick beans which crowd each other in the pods. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.00.

BUSH LIMA BEANS

Burpee's Improved Bush Lima—A sort distinct from Burpee's Bush Lima in that it is about ten to fifteen days earlier, bears much larger and thicker pods, and larger greenish white beans than Burpee's Bush Lima. The plants are vigorous, with heavy foliage and are about 2 feet high and of upright growth. The yield is about one-third more, and the beans of a luscious flavor. Pt., 35c.; qt., 65c.; 4 qts., \$2.40; peck, \$4.50.



BUSH LIMA BEANS—Continued

Dreer's New Wonder Bush Lima—It is a pure strain of neat dwarf growth, producing pods a week earlier than the stock of Burpee's Bush Lima. The plants are productive, the pods and beans are large. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., \$2.40; peck, \$4.50.

Burpee's Bush Lima—Vine about 20 inches high, erect and vigorous in growth; very prolific in large green pods, filled with large white beans. Pt., 30c.; qt., 60c.; 4 qts., \$2.25; peck, \$4.50.



Fordhook Bush Lima

Fordhook Bush Lima—The pods, borne in clusters of from four to eight, are much larger, and about six days earlier than Dreer's Bush Lima, which latter they otherwise resemble.

The green beans are large, and even when of full size, when cooked, are not dry, but tender, sweet, and luscious.

The bushes are decidedly erect in growth, with side branches well held up, and holding the pods from the ground, and thus protecting them from rust. A habit quite distinct from that of the low-growing growth of Dreer's Bush Lima. The foliage is large, like that of the Pole Lima. The leaves are large, smooth, and of a deep, rich green color.

The Fordhook is a one-third heavier cropper than Dreer's, and is destined to supersede it in every way. Pt., 35c.; qt., 65c.; 4 qts., \$2.40; peck, \$4.50.

BRUSSELS SPROUTS

Long Island Improved—This is a very desirable vegetable, though very little known in this country. It grows 2 or 3 feet high and produces from the sides of the stalk numerous little sprouts somewhat resembling cabbages; they are used for fall and winter greens. It can only be grown to perfection in a good soil and with a long season to complete its growth. The seed should be sown in March or April, in a frame, and the plants transplanted into the open ground and cultivated as cabbage. The plants should be watered and shaded for a week or ten days to give them a good start. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

BROCCOLI

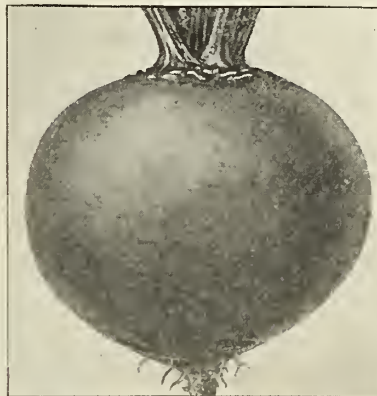
Cultural Directions—Broccoli is similar to and culture same as Cauliflower. It is well adapted only to those sections where the season is long, cool and rather moist. It withstands greater extremes of temperature than Cauliflower.

Early Large White French—The best variety, large, white, compact heads which remain firm for a long time. Pkt., 10c.; oz., 50c.; ¼ lb., \$1.75; lb., \$6.00.

BEETS

All the varieties succeed best on a deep, rich, sandy loam. For early beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

The Sugar and Mangel Wurzel varieties are grown for feeding stock and should be sown from April to June in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows; keep them well cultivated and you will have an abundant crop.



Crimson Globe Beet

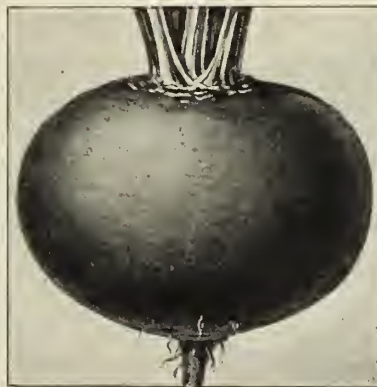
"New Crimson Globe" Beet—This is one of the best Bunching Beets yet introduced. A handsome variety of medium size, almost globe shape, and entirely free from rootlets; a grand second early or main crop sort. The roots are of medium size. Beets average 10 inches in circumference, very handsome in shape, being a little deeper than round, with a remarkably smooth surface. The foliage is small and of a rich bronze purple, borne on slender stems which occupy but a small portion of the root. Flesh is a rich blood red, slightly zoned or ringed in a most beautiful manner, making it very attractive in appearance; never stringy. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Detroit Dark Red Beet—A splendid Beet of a dark red color, for home or market. By far the best for canning, on account of its beauty. Small, upright tops and perfectly small roots. Flesh zoned with lighter and darker bands; tender and sweet. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Crosby's Improved Extra Early Egyptian Beet—An improvement on Extra Early Egyptian, being as early, but of more desirable shape, color and quality. It is very sweet and tender; a most valuable sort for early market, as it is ready before any other Beet of equal quality. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Eclipse—A globular crimson sort of very rapid growth. Bright red in color, and of fine flavor. A great improvement on its parent, the Egyptian. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Early Blood Turnip—Tops small, roots blood red, turnip shaped and very tender. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.



Crosby's Egyptian Beet

Crosby's Egyptian Blood Turnip—Forty days—This matures quicker than any other sort. Roots of fine form, medium size, smooth and dark in color, flesh dark red, fine grained, crisp and tender. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Bastians Half Long Blood—Sixty days—One of the very best, unsurpassed for its winter keeping qualities. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Improved Long Dark Blood—Sixty-two days—The best winter variety, but apt to be tough when sown too early. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

BEETS—Continued**Swiss Chard or Foliage Beet**

Swiss Chard Lucullus—This delicious and useful vegetable should be in every garden and on every market stall. It is really two distinct vegetables; first the leafy part of the foliage is cooked and served the same as spinach, while the stalks are cooked and served with drawn butter like tender asparagus. It grows about 2½ feet high, the stalks are thick and broad like rhubarb, the leaves are much longer than those of the regular Swiss Chard, they are heavily crumpled like Savoy spinach. Crisp and tender pleasing flavor. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

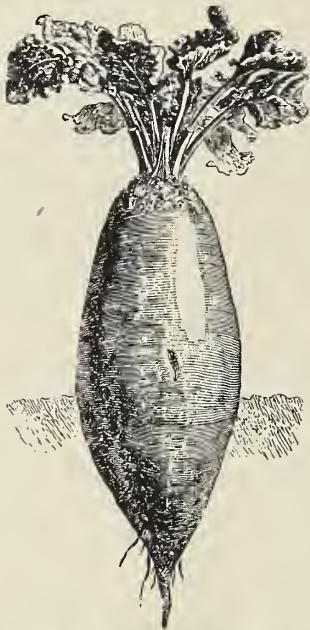
Large White Lyons—This variety possesses enormous white ribs, the leaf not being so crumpled as the Lucullus, but is equally as desirable. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Spinach or Silver—A good one. Not quite as large as Lucullus. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Sugar Beets and Stock Beets

White Silesian Sugar—Sixty-five days—Grown extensively for feeding stock; also for extraction of sugar. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Imperial White Sugar—Seventy days—A greatly improved variety of the White Silesian. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

**Long Red Mangel Wurzel Beet**

Giant Mammoth Long Red Mangel—Our stock is a great improvement on the old variety. The roots are very large, uniformly straight and well formed. Color deep red, roots solid, tops small. Roots attain a large size. We received several reports last season of Mangels weighing 20 to 23 pounds each. Produces an immense bulk and tonnage. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Golden Tankard—Large, round, orange-colored variety, of excellent quality, which keeps better than the Long Red, producing better crops on shallow soil. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Red Globe Mangel Wurzel—Similar to Yellow Globe, except in color, which is light red or pink. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Yellow Eckendorf—A handsome variety and heavy cropper; grows almost on surface of the ground, in shape broad with rounding top, flat bottom, good flavor, stock greatly relish this mangel. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

CABBAGE

Culture—For Cabbages the ground must be highly manured, deeply dug or plowed, and thoroughly worked to insure good full-sized heads. A heavy, moist and fresh loam is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted eighteen to twenty-four inches apart, early in the spring. In the South, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible. In transplanting, they must be set in the ground up to the first leaf no matter how long the stem may be.

The late autumn or winter varieties may be sown in a seed bed, from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed-bed, or they will run up weak and slender, and be likely to make long stems. Cultivate frequently throughout the season.

First Early**Early Jersey Wakefield**

Early Jersey Wakefield—Heads very compact, of medium size, varying from nearly round to conical. An early, sure-heading sort, very popular with Eastern market gardeners. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Dwarf Flat Dutch—Ninety-five days—Heads of medium size, solid, flat, grows low on stump, and is of good flavor. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Summer Cabbage—In size, form, solidity and earliness this is truly a model Cabbage. It heads just after our Jersey Wakefield. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

**Early Winnigstadt**

Early Winnigstadt—One of the best for general use, being a sure header, and will grow a hard head under circumstances where most sorts would fail. Heads of regular conical shape, very hard and keep well winter and summer. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Copenhagen Market—A solid, round-headed extra early of Danish origin.

Is remarkably short stemmed, with heads of large size, and of excellent quality. The leaves are light green. It is the largest of the early round-headed variety, and admits of very close planting. The crop can be cut at one time, as it matures uniformly. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Second Early

All Seasons—An "all-season" variety, equally good for Fall and Winter as for Summer use. The heads are large, solid, round, flattened on top, and of best quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Succession Cabbage—A wonderful Cabbage for solidity, productiveness and fine, large heads. Matures early, has handsome color and fine quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Sure Head Cabbage—(Pedigree Stock.) True American grown. Produces large, round, flattened heads that are all head, with fewer outer leaves, very uniform, firm and weighs from 10 to 15 pounds each. Splendid shipper and of an excellent quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

CABBAGE—Continued

Enkhuizen Glory—An excellent round-headed sort maturing with the Large Wakefield. It remains a long time after heading without bursting. Pkt., 10c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.50.

Late**Premium Large Late Flat Dutch**

Premium Flat Dutch—It has long been the favorite sort for cold slaw and sauerkraut. It matures just before severe frost and keeps perfectly over Winter. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

Large, Late, Drumhead Cabbage—This splendid Cabbage produces enormous heads. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

**Danish Round Head**

Danish Round Head—Short Stem—Somewhat superior to the Long Stem. Heads are larger and growing close to the ground. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Danish Ball Head Cabbage—This is the most excellent Cabbage, is very solid and outweighs any other Cabbage of equal size. The head is round with flattened top; a good keeper; first-class shipper and sells everywhere. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

All Head Savoy—A fine strain of the beautiful curled leaf variety, and is certainly entitled to a trial. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Improved Drumhead Savoy—The best of the Savoy for general market or home use. It has a short stump, grows to a large size, is compact and solid, and closely approaches the Cauliflower in delicacy and flavor. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

Mammoth Red Dutch—Is the largest Red Cabbage, and heads very solid and is deep red in color to the very center. No Cabbage is better for boiling or slaw, and its beautiful red color specially fits it for pickling. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

CHINESE OR CELERY CABBAGE (Pe-Tsai)

Shantung—A production of Shantung, a province in China. Distinctive flavor, very mild and pleasant. The outside leaves are large, round and light green in color. The heart is snowy white. We recommend this as a most excellent sort for either home garden or market planting. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

CABBAGE PLANTS

Ready May-July.

Early Jersey Wakefield, Charleston Wakefield, Winnigstadt, Early Dwarf, Flat Dutch, Henderson's Succession, Early Summer, All Seasons, Drumhead Savoy, Premium Late Flat Dutch, Improved Late Drumhead, Volga or Russian, Danish Round Head, Danish Ball Head, Copenhagen Market.

Prices on all varieties: 25 for 20c.; 100 for 50c.; 1000 for \$4.00.

If wanted by Parcel Post add 10c. per 100, to cover cost of postage and cost of packing.

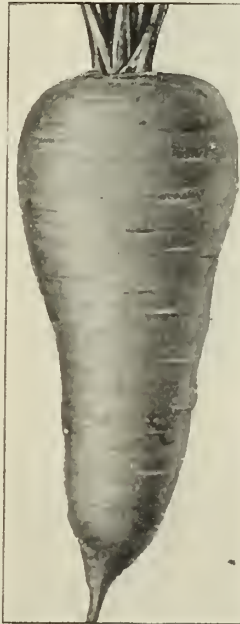
All plants will be packed in live moss, insuring long shipment. No plants shipped on Saturday.

CARROT

Culture—Sow in drills to 24 inches apart, using from 4 to 5 pounds to the acre, according to the distance between the rows.

It is necessary to sow carrots quite thickly, on account of the young plants not having sufficient strength to come through the ground when sown thinly. Cover one-fourth inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear use the cultivator or wheel hoe, and do not let the weeds get a start. Thin to 3 to 4 inches apart in the row as soon as the plants are large enough. Gather and store for Winter use like beets or turnips.

One ounce of seed will sow a row 100 feet long. Four to five pounds will sow an acre.

**Danvers Half Long Carrot**

Danvers Half Long—The most popular one; is a great producer and adapted to all kinds of soil. Its roots are orange red, very smooth and handsome, of medium length, tapering to a blunt point. The flesh is tender and crisp, fine for table use, and is a very desirable one for stock feeding. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

Early Half Long Scarlet (Stump Root)—45 days—A popular early variety, medium size, flesh bright scarlet, brittle and of good flavor. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

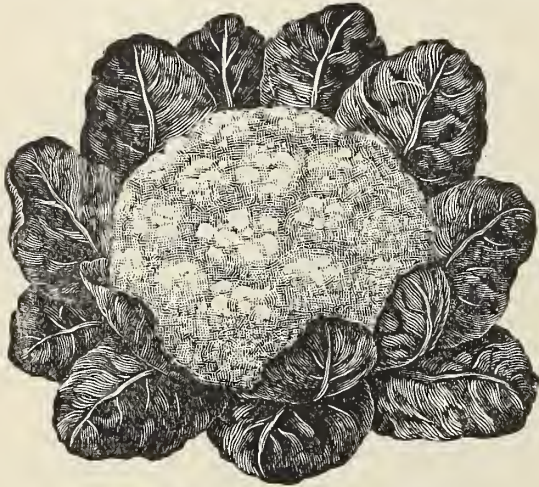
Chantenay Half Long—A very desirable variety. Smooth, short, thick, and stump rooted and of a rich orange color. Fine for the home garden. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

**Chantenay Half Long****Improved Long Orange**

Improved Long Orange—The well-known standard; roots long, thickest near the crown, tapering regularly to a point, color deep orange. One of the best for field crop and table use. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.

CAULIFLOWER

Culture—Sow for early use about middle September, in a bed of rich, clean earth. In about four or five weeks afterwards the plants should be pricked out into another bed, at a distance of four inches from each other each way; these should be encompassed with garden frames, covered with glazed sashes, and boards or shutters. The beds must be so secured, and the tops of the beds so covered as to keep out all frosts, giving them light and air every mild day throughout the Winter; transplant in April into a bed of the richest earth in the garden, at a distance of two feet and a half each way. Keep them well hoed, and bring the earth gradually up to the stems. The late variety matures in the Autumn, and is sown and managed similarly to Winter cabbage, but is not so certain to succeed in this climate.



Selected Extra Early Dwarf Erfurt

Selected Extra Early Dwarf Erfurt—Every grower of cauliflower should plant this strain especially recommended for forcing or open ground. Produces large compact heads of snowy whiteness on short stems. Pkt., 15c.; ¼ oz., 55c.; oz., \$2.00; ¼ lb., \$7.00.

Snow Ball Earliest Cauliflower—Our Snow Ball Cauliflower is the earliest, most hardy, and in fact the Cauliflower that you can plant and expect a crop of true, firm, snow-white heads. You cannot get better Snow Ball Cauliflower Seed no matter what price you pay. Many of the beautiful, shapely heads measure from 10 to 12 inches in diameter. Our Cauliflower seed is saved from absolutely perfect plants and is grown by the most experienced and critical growers in localities best suited for perfect development. Best for forcing; best for Wintering over early crop. Every plant will produce a fine head. Pkt., 20c.; ¼ oz., 75c.; oz., \$2.50; ¼ lb., \$8.00.

Lenormands—Large, late, and short stemmed. Head swell formed. A superior variety. Pkt., 10c.; ¼ oz., 20c.; oz., 75c.; ¼ lb., \$2.50; lb., \$8.00.

Mingle's Dry Weather—A very large second early variety, producing extra large compact heads, standing the heat remarkably well. Does excellent when grown for a fall crop. Pkt., 25c.; ¼ oz., 75c.; oz., \$2.50; ¼ lb., \$9.00; lb., \$30.00.

CELERY PLANTS

Ready July-August.

White Plume, Giant Paschal, Winter Queen, Boston Market, Golden Self-Blanching, Golden Heart, Winter King.

Celery Plants—50 for 40c.; 100 for 75c.

If wanted by Parcel Post add 10c. per 100, to cover cost of postage and packing.

All plants will be packed in live moss to insure long shipment. No plants shipped Saturday.

CELERY

Sow the seed, which is very slow to come up, early in the Spring, in rich, mellow ground, in a situation where it can be protected from the parching heat of the Summer sun; water freely in dry weather. When the plants are five to six inches high, transplant a portion in trenches well manured; the dwarf varieties three feet and the tall four feet between the rows; plant six inches apart in the rows, pressing the earth to the

plants. As they advance in growth blanch by earthing up, which should be performed gradually in fine weather, taking care not to bury the heart of the plants. A light dressing of salt applied when earthing up is beneficial.



Giant Pascal



Dwarf Golden Heart

Giant Pascal—This is a green-leaved variety and is an excellent sort for Fall and Winter use. It blanches to a beautiful yellowish white color, is very solid and crisp, having a fine nutty flavor. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Golden Self-Blanching—A dwarf sort, with numerous heavy and solid stalks, easily blanched. Heart solid, and with the leaves of a beautiful golden yellow. Pkt., 10c.; oz., 50c.; ¼ lb., \$1.75; lb., \$6.00.

White Plume—100 days—The stalks and heart are white, of good eating quality, crisp, solid, and of nutty flavor; is ornamental, resembling an ostrich feather. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Dwarf Golden Heart—Very fine; when blanched the heart is of a waxy, golden yellow, rendering it a most striking and showy variety for either market or private use. Pkt., 5c.; oz., 20c.; ¼ lb., 75c.; lb., \$2.50.

Soup, or Flavoring Celery—Old seed for flavoring soups, stews, etc., not for sowing. ¼ lb., 15c.; lb., 50c.

Celeriac, or Turnip Rooted Celery

Cultural Directions—This plant forms a thick root, which is used instead of the stalks. It is fit to use when about two inches in diameter. Seed should be sown and given same treatment as Celery, but the plants do not require earthing up. Plants can be set six inches apart in rows two feet apart. To keep over Winter, treat same as carrots or beets, except that moist soils should be worked up about the roots to keep them plump.

Large, Smooth Prague Celeriac—A large Celery flavored root used extensively for flavoring soups, pickles, etc.; also relished sliced as a salad with pepper and vinegar. It is also used to flavor chicken and potato salad. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

CHICORY

Cultural Directions—Sow in open ground in June in rows 12 inches apart, selecting good, deep, rich soil. Roots should be taken up in November, selecting those that have attained a diameter of from 1¼ to 2 inches (discard divided roots and those with narrow leaves, as well as any which bear several heads). Trim off tops about 1½ inches from the neck, and any secondary shoots that appear on the sides. Cut off the lower end of roots so they are of a uniform length of eight to ten inches. Plant in a trench 16 to 18 inches deep. Place roots upright one and one-half inches apart, fill the trench completely with good, light, well-drained soil.

Witloof (French Endive)—This grows in a solid oblong head and blanches ivory white. When lifting, cut whole head with part of the roots to hold the leaves together. It is the choicest of all the winter salads, and is used to such an extent in this country that much of it is imported. Pkt., 10c.; oz., 25c.; ¼ lb., 70c.; lb., \$2.50.

SUGAR CORN

Judging from the long and constantly increasing lists of corn which annually appear in the catalogues issued by the various seed houses throughout the country, the reader would be led to believe that they were in innumerable variety, more especially amongst the Early sweet and other kinds for table use. This, however, is not the case, as upon testing, most of them will be found identical, and the long lists will dwindle down to a few pronounced and distinct varieties; in fact, the difference exists more in name than in anything else. We have, therefore, in the present Catalogue confined ourselves to those distinct and standard varieties which the practical experience of market and family gardeners has decided to be the best for market and family use. Should other kinds appear which are really valuable they will be placed in stock.



Early Shaker Sugar



Kendel's Early Giant



Improved Stowell Evergreen

Early Shaker Sugar—Introduced by us to the Philadelphia market years ago; grows fine long ears for an early variety and is unsurpassed by any of the other early kinds. Pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Howling Mob—Superb long ears of sweetest quality. Stocks are of strong, vigorous growth $4\frac{1}{2}$ to 5 feet in height, abundant foliage and generally produces two fine ears to a stalk. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Golden Bantam—This very early, yellow grained Sweet Corn when in best condition for the table is remarkably sweet and tender. The stock we offer has been improved by several years of careful selection, and therefore will be found decidedly superior to much that is offered. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.00.

Golden Cream—A cross between Country Gentleman and Golden Bantam and combines the excellent qualities of both. When picked ripe is a very light yellow; after being cooked it turns darker, but not quite so much as Golden Bantam. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.75; peck, \$3.00.

Early Evergreen—A week or ten days earlier than Stowell's Evergreen, and of as good a quality. Pt., 20c.; qt., 40c., 4 qts., \$1.30; peck, \$2.40.

Kendel's Early Giant—A second early variety, maturing in about 68 days. An improvement over the old Corey. Ears 6 to 8 inches, with large, broad, white grains of rich sugary flavor, stalks short, bearing one or two ears. A very desirable sort. Pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Burpee's White Evergreen—Similar to Stowell's Evergreen, ears fully as large, but about five days earlier in maturity. The grains remain tender considerably longer than Stowell's. It retains its whiteness when canned, having no yellow tinge as has the Stowells. Pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Country Gentleman or Shoe Peg—70 Days—Yields from 3 to 6 ears on each stalk. One of the most delicious sugar corns grown. Kernels plump, pearly white, milky and so tender they melt in your mouth. It is deliciously tender, even when a little old. Ears average 8 or 9 inches long. Cob small, plump and filled zig-zag from end to end with pearly white kernels of great depth. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Black Mexican—A medium late variety, reputed to be the sweetest corn grown; while the grains are young they cook white, as the ear becomes older it cooks a violet shade on the outside, but in either stage or growth it is desirable. The ears are medium sized and are produced abundantly. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.60; peck, \$2.75.

Large Late Mammoth Sugar—85 days—The largest of all varieties, productive, fine flavor and sweet. A very desirable variety for the family garden. Pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

Improved Stowell's Evergreen—The truest strain of the leader of all Corns is in our possession. It remains longer in a first-class marketable condition than any other variety. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; peck, \$2.40.

CORN—Field Varieties

Eight Rowed Yellow—Flint variety with ears ranging from ten to twelve inches in length and one and a half inches in diameter. It is extremely well filled at both butt and tip and the kernels are large, broad and of a very distinct yellow color. Matures in 80 days. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Longfellow, Long Yellow—90 days—Ears averaging 13 inches. Very prolific. Narrow, small cob. Used quite frequently for replanting. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Mammoth Chester County—One of the very best for field culture, fine large ears, and producing a large quantity of fodder. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Mammoth Golden Dent—A cross between the Mammoth Chester County and the Oregon; we think this the most productive variety grown. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Mastodon—An early dent, of strong growth. Ears and grain large. A strong and quick grower, very productive, grains white and yellow. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.00.

Golden Beauty—Matures as early as the Golden Dent, and surpasses it in size, beauty of grain and productiveness. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Leaming Early Dent—An early, popular variety of Yellow Corn, medium ear, small grain, weighty and productive. Excellent for grinding. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

100 Day Bristol—A popular, light yellow colored, broad grain, thin cob, ears measure 8 to 10 inches in length. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Hickory King or White Ensilage—Remarkable for its large grain and small cob. A vigorous grower, ears round and of good size, two to four ears to the stalk, grain pure white. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Eureka Ensilage (White)—This grows invariably ten to twelve feet high, stands up during the most severe wind storms. Seed is white, very deep and broad with a thin cob. It will yield more fodder than any other variety. Qt., 15c.; 4 qts., 55c.; peck, \$1.00; bushel, \$3.25.

Coal Tar—To protect sprouting corn from birds. Pt., 20c.; qt., 35c.

POP CORN

A few years ago Pop Corn was grown only in gardens, rather as a side issue from the main business of the farm. It was plentiful throughout New York and the New England States.

Now it is grown as a special crop, great quantities are raised in the Central Western States, and owing to the careful selection of seed and thorough cultivation covering a series of years, this district now produces a quality of Pop Corn superior to any heretofore raised, the White Rice Pop Corn being the most popular variety.

Who does not enjoy munching a snowy pop corn ball flavored with delicious syrup, or relish a bowl of crisp corn plentifully sprinkled with salt and butter? 1 lb., 14c.; 2 lbs., 25c.; 10 lbs., \$1.00.

Larger Lots—Prices on application.



POP CORN POPPERS

1 qt. size (5 x 7 inches), 25c each.
2 qt. size (7½ x 9½ inches), 35c each.
4 qt. size (9 x 12 inches), 75c each.
Handles included.

CHERVIL

Cultural Directions—Sow in early spring in rich, well prepared soil. The seed is slow to germinate, sometimes remaining in the earth four or five weeks before the plants appear. When the plants are about two inches high, transplant or thin to about one foot apart. They are ready for use in six to ten weeks from sowing.

Curled—It is a hardy annual with aromatic leaves which are used for flavoring soups or for garnishing meats and vegetables. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

CORN SALAD

Sow in August or September for winter or spring about one-quarter inch deep, in rows one foot apart. Thin out and keep clear of weeds. Protect in winter by thin covering of straw or meadow hay. Ready early in spring; use same as Lettuce. For summer use sow early in spring.

Broad Leaved—Used as a small salad throughout the Winter and Spring. Sow early in Spring in drills one foot apart and keep weeds down by frequent hoeing. For Winter and early Spring use, sow in drills in August and September. Cover with straw on approach of Winter. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

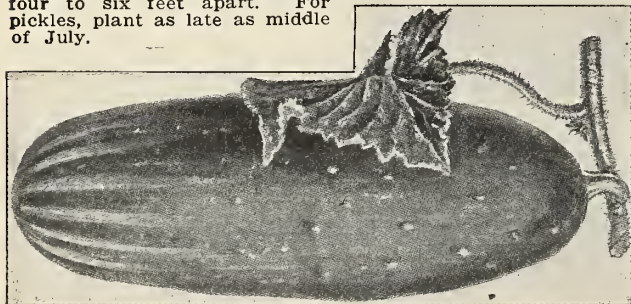
CRESS—Pepper Grass

Fine Curled or Pepper Grass—Used as a small salad. Sow very thickly in shallow drills, on a smooth surface, at short intervals throughout the season. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

True Water—Used as a salad in Spring and Fall, or as a garnish during Winter. Start the seed in pans or moist earth and transplant to shallow water or running brook. Pkt., 10c.; oz., 45c.; ¼ lb., \$1.35; lb., \$5.00.

CUCUMBER

The Cucumber can be grown by any one who has a few square yards of soil with an exposure to the sun. For early use, make rich hills of well rotted manure the latter part of Spring, planting a dozen or more seeds, covering one-half inch deep, pressing the earth firmly over them. When danger from insects is over, pull all but three or four of the strongest plants; make the hills from four to six feet apart. For pickles, plant as late as middle of July.



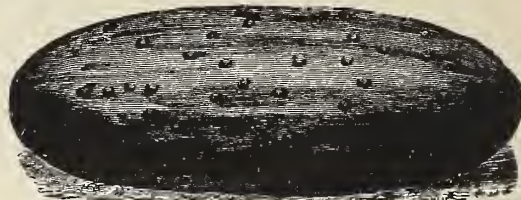
Improved Early White Spine

Improved Arlington White Spine—60 days—This is one of the best for table use now being grown. Vines vigorous, fruit straight and handsome, color light green, with few white prickles, tender and of excellent flavor. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.10.

Davis Perfect—Resembles a hot-house cucumber so closely that dealers cannot tell the difference, it being equally good for the hot-house or outdoor culture. It is ideal in shape, rich, dark green color, uniform and regular in size, it is exceedingly tender, and as a slicing cucumber for the table it is unsurpassed. It is almost seedless one-third of its length from the stem and the seeds contained in it, when in slicing condition, are so small and tender that they are almost unnoticed. Exceedingly productive. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Jersey Pickle (Selected Stock)—One of the very best of pickling cucumbers, vines vigorous and productive, fruit long, firm and crisp; when small used for pickles, when large for sweet pickles. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Japanese Climbing—A trellis variety used for shade as well as eating purposes. The vine is very ornamental, producing extra big light green fruits in abundance. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.



Improved Long Green

Improved Long Green—The best pickling variety, dark green color, tender, crisp and productive. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Lemon—Fruit is nearly round with yellow and green markings, flesh tender and crisp, possessing a fine flavor, excellent for pickling. Pkt., 5c.; Oz., 20c.; ¼ lb., 65c.; lb., \$2.25.

Klondike—An early dark green strain, producing finely shaped fruit, slightly tapered, about 9 inches in length. They hold their color and brittleness after being cut which makes it an excellent shipper for distant markets. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.10.

Short Green Pickle—50 days—This is the favorite Western pickling variety, and is growing in favor here every season. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.



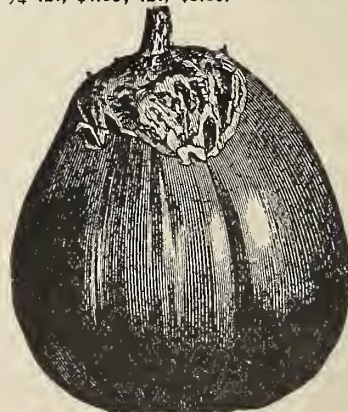
Gherkin (or Burr)

Gherkin (Burr Pickle)—Small, oval shaped, prickly variety, used only for pickling. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

EGG PLANT

Sow in hot-beds early in March; transplant middle of May to first of June, in a rich, warm piece of ground, about 30 inches apart. Draw the earth up to their stems when about a foot high. Egg-plant seed will not vegetate freely without substantial heat, and if the plant gets the least chilled in the earlier stages of growth, they seldom recover. Repeated sowings are sometimes necessary. Care should be taken in cutting the fruit so as not to disturb the roots, which injures the plants. Matrices for table in 120 days.

Early Long Purple—This is one of the earliest varieties, hardy and productive, fruit long and of superior quality. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.



Improved N. Y. Purple Egg Plant

New York Improved Egg Plant—(Spineless)—A vigorous grower; fruit large, fine, free from thorns, and produce until frost; skin of a rich purple, flesh white and of a rich flavor. We can highly recommend this Egg Plant. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.

Prices in this Catalog are subject to change without notice.

EGG PLANT—Continued

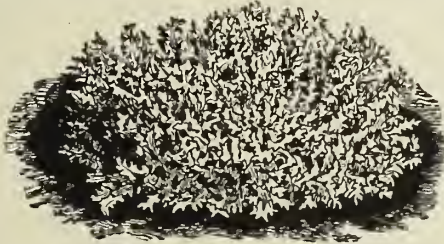
Black Beauty—Two weeks earlier than the New York Spineless Egg Plant and a splendid shipper. Fruit large and of fine flavor. Plants branch freely near the ground. Skin is a rich lustrous black. Satin gloss and rich coloring add greatly to the beauty of the fruit. The heavy leaves which attach the fruit to the stems are bright green, making a beautiful contrast with the fine dark color of the fruit. Thoroughly free from spines or thorns. Fruit sets freely. Being two weeks earlier than the New York Purple Plant they readily bring double the price. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.

EGG PLANT, PLANTS

Ready after May 1st. Pot grown stock only. 6c. each; 60c. dozen. Not mailable.

ENDIVE

An excellent Fall and Winter salad, when Lettuce is getting scarce. Sow late in the Spring to middle of Summer in shallow drills, and thin out to a foot apart; blanch by tying the leaves together near the top.

**Green Curled Endive**

Green Curled—Is the hardiest variety, with beautifully curled dark green leaves, which blanch white, and are very crisp and tender. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Broad Leaved Batavian—Has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups; if the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

HORSE RADISH ROOTS

Horse radish is not grown from seed, but from cuttings of the roots. We offer:

Mallner Kren—A quick-growing variety, producing large white roots. 20c. doz.; 100, \$1.00; 1000, \$8.00.

Standard Variety—In strong cuttings. 15c. doz.; 100, 85c.; 1000, \$6.50. Add 10c. per 100 Parcel Post rate if wanted by mail.

KALE—Borecole

Sow from May to June, and set out the plants in July, in good, rich soil; cultivate same as cabbage. For Spring use sow in September; protect during Winter with covering of straw. It takes 50 days to produce a crop fit for cutting.

Siberian Curled Kale—The green leaves are very large and comparatively plain in the center, but heavily curled on the edge. It is a fast grower, extremely hardy and will stand longer in the Spring without bolting than any other variety. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 85c.

**Dwarf Green Curled Scotch**

Dwarf Green Curled Scotch—Makes excellent greens for Winter use, dwarf and easily protected during the Winter. Pkt., 5c.; oz., 15c.; ¼ lb., 30c.; lb., \$1.10.

KOHL-RABI

Turnip Rooted Cabbage—Grows on a stalk in the shape of a bulb 2 to 3 inches in diameter, the leaves protruding from the sides of the bulb. Requires a light, rich soil. Sow in Spring in rows 1½ feet apart, thinning down to 8 inches. For Fall, plant latter part of July. One ounce will plant 150 feet of drill. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

LEEK

The Leek is hardy and of easy culture; sow early in Spring in trenches eight inches deep, and have the soil at the bottom fine and rich; thin six to eight inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant.

London Flag—90 days—This is the best variety, and succeeds better in this country than any other. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

Muscelburgh—Foliage fan-shaped and strong in growth. Large in size and leaves broad. A fine market variety. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

LETTUCE PLANTS—Ready May 1st

Big Boston, May King, Cos., etc. 500, \$2.15; 1000, \$4.00. By Parcel Post add 5c. per 100; 25c. per 1000.

No plants shipped on Saturday.

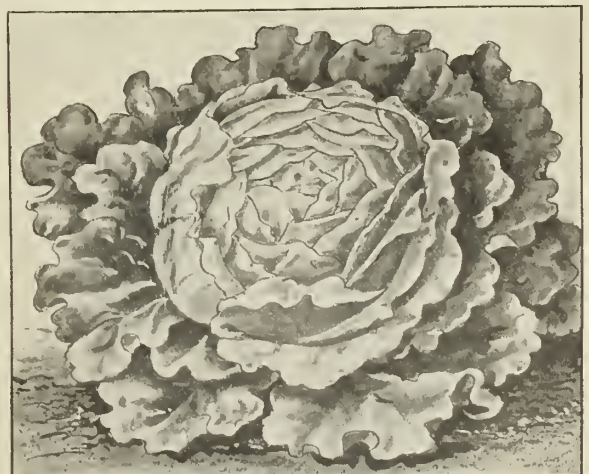
LETTUCE

There is no vegetable which is more universally used than this. It is of easy culture, and thrives best in rich, moist soil. Its quality depends largely upon rapid and vigorous growth; to secure this, have the soil rich and mellow, with frequent surface cultivation and an abundant supply of water.

**Early Curled Simpson (Black Seeded)**

Early Curled Simpson—A very large loose-leaved sort, and larger than ordinary Simpson. Excellent for table. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

Early Curled Sillesian—An early variety of strong growth, leaves large, light yellow and wrinkled. It does not form a head, but is the best variety for cutting when young. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

**May King Lettuce**

LETTUCE—Continued

Romaine, Cos or Celery Lettuce—Grows to a very large size, producing long-pointed, compact bunches. The inner leaves blanch readily and are of fine flavor. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.35.

May King Lettuce—Equal alike for forcing under glass or outdoor planting. The plants are of quick growth, practically all head and handsome. From early Spring plantings in the open ground they grow quickly to a diameter of six to seven inches, with the broad, light green outer leaves folding closely about the round solid head. In cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves are blanched to a rich golden yellow, and have a specially fine, rich, buttery flavor. The solid round heads are so firmly folded that they can be shipped to distant markets and arrive in the best of condition. It is the very best lettuce for early planting in the Spring, and again during August and September for Fall use. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Big Boston—Heads large and very solid, stands heat of Summer, also excellent for Autumn. Color, light green. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.35.

White Dutch Butter—The best variety for cultivation in the latitude of Philadelphia; fine large heads, and stands the heat of Summer well. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

Cabbage Head—Heads large and fine, pale green without, and white at centre; crisp and tender, fine Summer variety. Pkt., 10c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

Imp. Salamander—One of the best compact headed sorts for outdoor use; will withstand the heat without running to seed. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

Hanson—A fine, large-heading variety. Leaves curled on the edges; light yellowish-green in color. The head is crisp and brittle and flavor excellent. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

Grand Rapids—The best loose-leaved curled variety for forcing. It is a very rapid grower, and will stand high temperature. It does not wilt quickly after cutting, and will therefore stand shipping. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Iceberg—A large, crisp lettuce, always tender, stands hot weather remarkably; give each head 14 inches in the row. The color is light green, lightly tinged with brown. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Prize Head—One of the very best loose-bunching or non-heading varieties. Leaves brown, very curly and of remarkably fine flavor. Grows quickly, and all except the outer leaves are very brittle. It is probably the most easily-grown lettuce in cultivation. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.15.

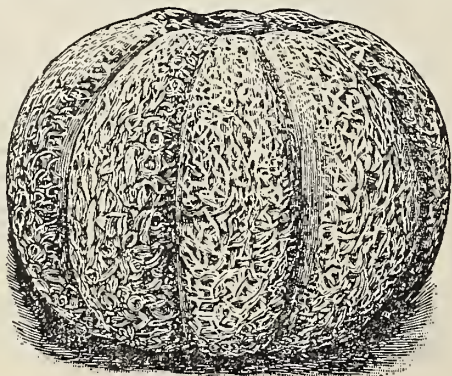
MELON—Cantaloupe Salmon-Fleshed Varieties

Culture—Plant early in May, when the ground has become warm and dry, in hills six feet apart each way; use well rotted manure, and if plants grow very rank, finer fruit will be secured by trimming off the ends of the shoots when about three feet long. Do not plant near pumpkins, squashes or cucumbers, as they will mix with and injure the quality of the melons.

Burrells' Gem—The golden fleshed Rocky Ford. The Burrells' Gem, which is an improved Rocky Ford, averages 2 lbs. in weight, 6 inches in length and 4½ inches across. It is very solid and has a small seed cavity. The flesh is golden in color, very thick, fine-grained and spicy. An abundant yielder and a good shipper. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Golden Honey Dew—This grand new melon is a sport from Honey Dew, which it resembles except in color. The flesh is a rich golden instead of light green, very sweet, keeps a long time and by many is considered superior to the green-fleshed variety. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

Emerald Gem—A splendid early variety, coming in just ahead of Rocky Ford; fruit emerald green in color, globular or slightly flattened, irregularly ribbed and lightly netted; flesh very thick, of a deep rich salmon color, and having an exceedingly small seed cavity. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.



Fordhook

Fordhook—A fine, large, early ripener. Skin dark green mixed with stripes of lighter green. Thin rind and tough skin, well adapted for shipping. Flesh bright red, crisp and sweet. Flavor one of the finest. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.35.

Green-Fleshed Varieties

Rocky Ford—70 days—The flesh is deep and thick, and light green in color, except next the seeds, where it inclines towards yellow. The flavor exceedingly fine. The skin is green, regularly ribbed and thickly netted. It is a firm, solid melon, and will carry in perfect condition for a week or more after its removal from the vine. It is a heavy cropper and is in wide favor as a market melon. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.35.

Honey Dew—The juicy, light green flesh frequently measuring two inches thick, entirely stringless and especially luscious in flavor, most tender and practically melting in the mouth. It is as sweet as honey. This delicious flavor extends practically to the very rind. The rind is mottled. The shell is hard and about ¼ of an inch thick. There is no seed cavity. The seeds are imbedded in a jelly-like pulp. Plant the same time you would any other cantaloupe. When the under side of the melon becomes a golden yellow it is ready to take off. By storing in a cold, dark place in sand, being careful not to allow them to touch each other, they could be kept until Christmas. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.; lb., \$1.75.

Jenny Lind Improved—65 days—Resembles the old variety only that it matures earlier and is better filled out, roughing up better, and keeping fully a week longer than any other variety. Is a handsome green fleshed sort and invaluable for a first early; and of delicious quality. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Netted Nutmeg—Oval in shape; netting rough. A melon of fine flavor. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Hackensack—A popular large sized melon, flattened at the poles, deeply netted and ribbed, flesh green and well flavored. One of the best for shipping, and is a favorite with market gardeners. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Montreal—Largest of the nutmeg varieties; averaging a weight of 15 lbs., nearly round, flattened at the ends, deeply ribbed, green, netted skin. Flesh green, thick, and of fine flavor. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Baltimore or Acme—The fruits are medium sized, oval or long oval, slightly pointed at stem end, slightly ribbed, and are covered when ripe with coarse netting. The flesh is thick, green, well flavored and sweet. This variety is a very productive, sure cropper of good quality. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

MELON—Watermelon

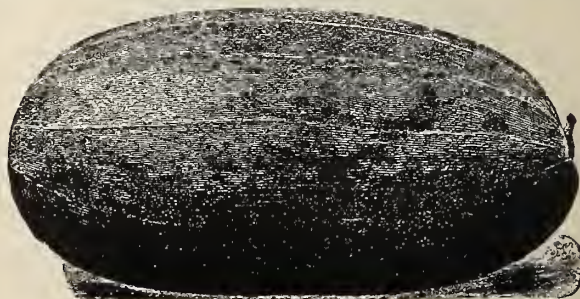
Culture—The soil for Watermelons must be light, rich and sandy, for if grown on a heavy soil the quality will be poor, and they will not be so early. When there is more danger of frost drop 8 to 10 seeds in hills 8 to 10 feet apart each way, covering about ¼ inch deep. As soon as plants commence to run, thin out to 3 best plants in a hill, and cultivate until the vines cover the whole ground. If slow to fruit, pinch off the ends of the growing shoots. Ash or air-slaked lime sifted on the young plants while dew is on is good to keep insects out. One ounce will plant about 30 hills, and it takes 3 to 4 pounds to an acre.

Mountain Sweet—An old sort still holding its own in the public favor. A first class productive melon, of large size, skin dark green, flesh a rich crimson, very sweet, and of fine flavor. Seeds gray. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Tom Watson—An early, large, oblong, dark green melon, with thick netting. An introduction from one of the best melon districts in the South. Rind thin, but tough, making it a favorite shipping sort. The flesh is firm, and of a bright red color, delicious, sweet and melting. An excellent sort for the private or market gardener. The average melon will weigh 35 to 40 pounds and measure 28 inches long and about 12 inches in diameter. Very prolific. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Long Light Icing—75 days—Very light green skin, flesh bright, red, crisp and sugary, excellent quality. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Cole's Early—An early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.



Kleckley's Sweets

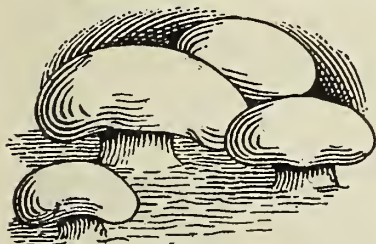
MELONS—Continued

Kleckley's Sweet—A handsome melon for both the private and market garden. Shape oblong, skin dark green, and slightly mottled, thin rind, flesh bright scarlet, very sweet, crisp and melting. Heart solid. One of the best melons grown. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Citron Water Melon—This is the well known melon for making preserves or condiments. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Halbert's Honey—Fully equal in quality to Kleckley's Sweet, which it resembles. It is more even in outline, is blunter at the end, and the skin is of a richer, darker color. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

MUSHROOM SPAWN



Culture — Mushrooms may be grown in cellars, under benches of green-houses, or in sheds, wherever the temperature of 50 degrees can be kept up through the Winter. The beds should be made from November to February, according to the time the mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse

manure, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent heating, until the pile is large enough to make a bed the required size. Three to four feet wide, eight inches deep and any length desired are the proper proportions for a bed, but these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees, make holes in the bed about a foot apart each way and about one inch deep, into which put pieces of the spawn two or three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. Take special care, however, when water is given, that it be at a temperature of about 100 degrees.

Brandywine Pure Culture Spawn—Per brick, 25c.; per brick (postpaid), 35c.; 5 bricks, \$1.20; 10 bricks, \$2.15. Larger lots, prices on application. **English Milltrack**, 15c. per brick; (post-paid), 25c. per brick; 1 doz., \$1.60. Larger lots, prices on application.

MUSTARD

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach. Matures in 30 to 35 days.

White English—This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 50c.

Brown Italian—This is a larger plant than the preceding, with much darker leaves; seed brown and more pungent. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 50c.

OKRA, OR GOMBO

The green capsules of this plant are used in soups, stews, etc., to which they impart a rich flavor and are considered nutritious. Plant the seed about the middle of May, in hills or drills. Plant the seed thickly, as it is liable to rot in the ground; rich ground is necessary; 60 days from planting to maturity.

Perkins Mammoth Pod—A tall handsome plant producing very long, slender green pods; very prolific and a popular one. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 60c.

White Velvet—An early maturing and very productive variety, growing about 3½ feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sort and is very popular in some sections. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 60c.

ONION

Culture—Onion seed should be sown as soon as possible in the Spring, even if the weather is cold, so the soil works up well. This gives them a good start ahead of the weeds, and before dry weather sets in. After thoroughly pulverizing the soil, sow thinly, four or five pounds to the acre, in drills, 14 to 16 inches apart, and about one-quarter inch deep, in strong land, well manured, keeping them well hoed and free from weeds.

The Silver-skin and Yellow Danvers are principally grown (for sets) in this vicinity. Sow the seed early in the Spring, very thickly in beds or drills. As soon as the tops die off in the Summer, remove them to a dry, airy place, and early in the following Spring replant in rows about two inches apart, the rows wide enough apart to admit of hoeing. The onions by this process are obtained of a large size early in the season. We can also supply the sets themselves early in Spring, at current market prices.

The Prizetaker may be grown to large size by sowing in drills early in March, in strong land, and thinning them out to stand two or three inches apart, keeping them well hoed.

Extra Early White Pearl—A transparent, waxy, early variety, flat, and of very mild flavor. In some sections attaining a size 5 to 6 inches in diameter. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.85.

White Portugal or Silver Skin—85 days—Large flat onion of mild flavor, skin clear white; grown extensively for sets, very desirable for pickling and is the best white sort for this purpose. Used extensively in the spring for green bunch onions. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.10.

Queen—A silver-skinned variety, of mild flavor, early, a good keeper, and an excellent pickling onion. Pkt., 5c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.



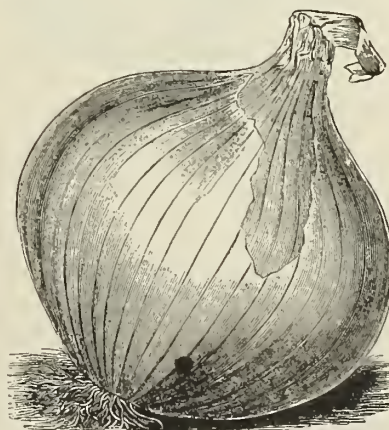
Southport White Globe—In shape same as Yellow or Red Globe, but milder, not so good a keeper. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

Yellow Strasburg—The old popular Philadelphia variety; not as strong flavored as the Red; a first rate keeper, and valuable for shipping. Pkt., 5c.; oz., 20c.; ¼ lb., 55c.; lb., \$1.85.



Yellow Globe Danvers—115 days—A fine variety, originating in Danvers, Mass.; above the medium size, oval shaped; skin yellowish brown; flesh white, mild and well flavored; very productive. Pkt., 5c.; oz., 20c.; ¼ lb., 55c.; lb., \$1.85.

Large Red Wethersfield—110 days—The standard Eastern variety. Grows to large size directly from the seed; skin deep purplish red; form round, flat; flesh purplish white and stronger flavored than any of the other kinds. Pkt., 5c.; oz., 20c.; ¼ lb., 65c.; lb., \$2.25.



Prizetaker

ONIONS—Continued

Prizetaker—Seven to nine hundred bushels to the acre, and a single specimen weighing as much as 4 pounds are some of the things this handsome globe onion will produce. It has a bright, clear, straw color, and grows a perfect globe-shape. Is by far the handsomest, most productive, most profitable, and best of all the yellow globe onions. Large onions can always be raised in a single season from the seed. It has always brought much better prices than any other onion in the market; it never fails to attract attention on account of its beauty; on the city stalls, it has completely taken the place of the large Spanish Onions. The Prizetaker Onion is gifted with strong drought resisting ability, and we consider this one of its strong points. It is admitted by the most critical onion growers to be the largest, finest flavored, and most superior yellow globe onion under cultivation. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

ONION SETS

The Onion sets grown in the vicinity of Philadelphia are recognized everywhere as the best in the country; they are more solid and brighter, and their keeping qualities much better than those grown elsewhere. The best varieties are named below. Onions grown from sets come into market long before those grown directly from the seeds, and in consequence much higher prices are realized from them.

Extra Early Red. Strasburg. Yellow Danvers. Silver Skin. (Market Price.)

Winter Onions—(Egyptian, Perennial, or Tree Onions)—An unusually hardy variety in the colder States, remaining in the ground with safety all winter. It starts early in the Spring and may be bunched and marketed several weeks before any other variety. The quality is inferior, but the bulbs find a ready sale when other varieties of onions are wanting. Qt., 20c.; peck, \$1.00; bushel (of 28 lbs.), \$4.00.

PARSNIP

This well-known culinary vegetable does best on a deep, rich, sandy soil; fresh manure should not be used, as it is apt to make the roots coarse and ill-shaped. The seed is sometimes slow to germinate; it should be sown early as possible, covering half an inch deep, and the soil pressed firmly over the seed; thin out so that the plants will stand four inches apart.



Sugar Parsnip

Hollow Crown Sugar Parsnip—Is fine grained, true hollow crown; has thick shoulders, tapers symmetrically to a single tap root. Are easily gathered; heavy croppers; roots run uniformly smooth, with fine grained flesh, and good quality. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

PARSLEY

Sow early in April in rows. Soak the seed a few hours in warm water before sowing, or it may lay two or three weeks in the ground before vegetating. A few Radish Seed mixed with the seed when sowing will mark the rows and facilitate weeding. One ounce to 150 feet of drill. Make open air sowing in April.

Plain or Single—Dark green color, and very hardy. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.



Double Curled Parsley

Double Curled—A dark green market variety of dwarf habit. Stands the Winter better than other varieties, but is less curled. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

Moss Curled—Leaves bright green, curled and crested like fern or moss, very ornamental for garnishing or garden decoration. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

Hamburg Rooted—The standard rooted sort. The leaves are used for soup greens, and the roots when sliced are much esteemed. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

PEAS

INOCULATE THIS
SEED WITH
MULFORD CULTURE

The Pea is so generally known that it is needless to give any description of it. There are many new varieties coming out every year, most of which turn out to be no better than the older sorts. We have carefully culled them over, and our list will be found to contain all that are really valuable. The Pea matures earliest in a light, rich soil; but for general crop, a rich, deep loam will be found best. The Extra Early varieties should be sown as soon as the ground can be worked in the Spring, and continue every two weeks for a succession. The tall varieties require brush stuck in between rows. The wrinkled varieties are superior, more delicate in flavor, and remain longer in season than the smooth sorts, but are not so hardy.

The dwarf varieties suit best for small gardens, and can be planted in rows one foot apart. One quart for 75 feet of drill, two to three bushels to the acre.

First Early

Mingle's Extra Early—48 days—For family use this is probably equal to the Improved Premier; it does not ripen so evenly, but keeps in bearing longer. Pt., 25c.; qt., 50c.; 4 qts., \$1.60; peck, \$2.75.



Mingle's Extra Early

First and Best—A desirable Extra Early. Vine 3 feet, and a strong grower, continues in bearing as long as other Extra Early Sorts. Pt., 25c.; qt., 50c.; 4 qts., \$1.60; peck, \$2.75.

Nott's Excelsior—50 days—A fine dwarf wrinkled sort, maturing as early as most smooth varieties. Very tender and of fine flavor. Pods $2\frac{1}{2}$ inches. Vines 14 inches. Pt., 30c.; qt., 55c.; 4 qts., \$1.75; peck, \$3.25.

American Wonder—52 days—A hybrid between Champion of England and Little Gem; it is an enormous cropper, and ripens in about fifty days from germination. Pods $2\frac{1}{2}$ inches. Vine 10 inches. Pt., 30c.; qt., 55c.; 4 qts., \$1.75; peck, \$3.25.

PEAS—Continued

Gradus—No other pea introduced for years has met with so extensive sale and commanded so high a price. It withstands an extraordinary amount of cold and wet weather, so plant it early and your returns will surprise you. It matures and is marketed before the Pea Louse gets a chance at it. Besides being so attractive, the sweet delicious flavor and excellent quality bring back a customer who has once bought them. Foliage large and luxuriant, pale green in color; pods long, straight, slightly rounded at the point; seed large, wrinkled, cream color, tinged with green, height 3 ft. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Pilot—A new pea of English origin very similar to Gradus as to earliness, color of vine and pod as well as quality. Vines grow to a height of 3 to 4 feet with foliage medium to dark green color. Pods are large, pointed at end and broad. Dark green in color. Is fit for table use 60 days from planting. Seed yellow and green mixed, medium sized and nearly smooth. Pt., 35c.; qt., 65c.; 4 qts., \$2.40; peck, \$4.50.

Laxton's Prolific—Height 3 feet, an extra early. Pods $3\frac{1}{2}$ inches and blunt, very prolific and well filled; seed wrinkled, cream color tinged with green. Vine 3 feet. Pkt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.



Alaska

Alaska—An extra early, vine about 2 feet high, seed green and round, in well filled pods, produced in abundance. Excellent for market or family use. Pt., 25c.; qt., 50c.; 4 qts., \$1.60; peck, \$2.75.

Ameer—Similar to Alaska, but not quite so early. Vine a little longer, pods well filled and somewhat light green dented. Pt., 30c.; qt., 55c.; 4 qts., \$1.75; peck, \$3.25.

Sutton's Excelsior—A marked improvement in the dwarf wrinkled class. Similar in habit of growth to Nott's Excelsior, but bearing very large, broad pods filled with large peas, tender and of exquisite flavor. As a wrinkled sort it leads in earliness, with much larger and handsomer pods than any dwarf early wrinkled pea yet introduced. It is a pea of first-class merit, and a good cropper. Pods 3 inches long, broad, straight and well filled. Seed pale green, wrinkled. Vine 15 inches. Pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$5.00.

Little Marvel—Vines of dwarf, even growth, averaging 15 inches in height. Heavily set with fine pods and frequently borne in pairs. Ready for table fully as early as American Wonder; vines are larger and produce a much heavier crop. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Second Early

McLean's Premium Gem—An improvement on the Little Gem, being larger and more productive. Does not ripen quite so early, is very luscious in flavor, and is a general favorite. Pods $2\frac{1}{2}$ inches. Vine 14 to 16 inches. Green wrinkled seed. Pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Laxtonian—Of vigorous growing habit, luxuriant foliage of dark green color. Large seed, white and green. Pods $3\frac{1}{2}$ inches long, broad and pointed at the ends. This is a fine half-dwarf wrinkled sort. Pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Potlatch—A vigorous growing, half-dwarf variety of luxuriant, strong foliage of dark green color. Pods $3\frac{1}{2}$ inches long, of medium green color, broad, and pointed at the ends. Seed large green and wrinkled. Straw 24 inches long. Pkt., 30c.; qt., 55c.; 4 qts., \$1.90; peck, \$3.50.

Fillbasket—Height 30 inches, of branching habit; pods well filled and therefore indispensable to the market gardener, and large croppers. Pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Late

Dwarf Champion—44 days—very much liked by those who have tried it. In quality and flavor equal to Champion of England, and the vine only 2 feet. Equal to Little Gem. Pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Daisy or Dwarf Telephone—Among the medium early dwarf sorts, ripening a week ahead of Stratagem. It is a most desirable pea on account of the large size, beautiful shape and fine quality of its well-filled pods, containing six to nine tender sweet peas. Seed green, wrinkled. Pods 4 inches. Vine 18 inches—very vigorous and quite prolific. Pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Improved Telephone—One of the recent introductions from England, where it is highly prized; grows about 3 feet high, and is the best tall pea in existence, an enormous bearer, producing straight, showy pods, containing from nine to ten peas in a pod. Pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Long Island Mammoth—Very popular with the farmers in most sections who want a large, handsome pod of deep green color that carries well. Is becoming more popular every year. Height 3 feet. Pt., 30c.; qt., 55c.; 4 qts., \$1.75; peck, \$3.25.

Prince Edward—The largest podded, late, long-vined sort, pods 6 to 8 inches long. Splendid quality and immense yield. Pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Dwarf Gray Sugar—Seed gray, pods purple; large and eaten like string beans. Vine 18 inches. Pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

PEPPER

Sow in hot-beds in March, or in a warm border early in May, transplant and thin out to stand 16 or 18 inches apart; hoe frequently, to keep down the weeds. Edible in 100 to 120 days.

Large Bull Nose or Sweet Mountain—Plant vigorous, compact, very productive, ripening its fruit uniformly and early. Fruit large, of blocky form, with thick flesh, usually quite hot. Pkt., 10c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Mammoth Golden Queen—Fruit large size, bell-shaped, rich golden yellow color, with sweet thick flesh of fine flavor. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$5.00.

Long Red Cayenne—Pod long, slim and pointed; color, bright red and very pungent. Pkt., 10c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.10; lb., \$4.00.



Large Bull Nose

New Neapolitan—A great market variety on account of its earliness and productiveness. Two weeks earlier than Bull Nose. The fruit is of good size growing on a vigorous stalky plant. The flesh is quite thick and sweet as an apple. Color a light green changing to a bright red when ripe. Pkt., 10c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.10; lb., \$4.00.

Ruby King—Fruit $5\frac{1}{2}$ x $3\frac{1}{2}$, bright red in color and of distinctively mild flavor. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.20; lb., \$4.50.

Our satisfied customers are our best advertisement. Join the ranks.

We pay postage on packets and ounces. Add 5c. per pint and 10c. per quart for peas when ordered by mail.

PEPPERS—Continued

Chili, Red—Small red, conical pods about 2 inches long. Very hot and prolific. Generally used for seasoning and pepper sauce. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

PEPPER PLANTS**READY IN MAY.**

Pot Grown Plants—Doz., \$1.00; 100, \$5.00.

Transplanted—Doz., 25c.; 100, \$1.00.

Pot grown plants are not mailable.

All plants will be packed in live moss, insuring long shipment. No plants shipped Saturday.

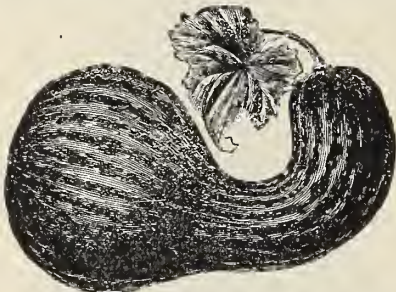
PUMPKIN

Culture—Sow in hills 8 or 10 feet apart each way, or in fields of corn, about every fourth hill; avoid planting near melon or squash vines, as they will hybridize.

Sweet or Sugar—A handsome variety and very popular. Does not grow as large as the field varieties. The skin is a deep orange yellow, flesh fine grained and sweet. The most famous in Boston for pies. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.25.

**Sweet or Sugar Pumpkin**

King of Mammoths—Has been grown to weigh 200 pounds, surpassing any other variety for size. The flesh and skin are both bright yellow and of excellent quality. The Mammoth is one of the best pie pumpkins grown, also a splendid keeper and valuable for feeding purposes. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

**Cashaw (Crook Neck)**

Cashaw—Long Yellow Crook Neck, one of the best among pumpkins; sometimes weigh as much as 60 to 80 pounds. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Large Cheese or Kentucky Field—A very productive variety, broad and flat in shape, rich green color, flesh is very tender, good for table or stock feedings. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Connecticut Field—Best for cattle feeding. Oz., 10c.; ¼ lb., 25c.; lb., 90c.

POTATOES

Potatoes—The soil best suited to the potato is a rich sandy loam, but it seems to thrive in almost any soil and climate. Plant as early in the Spring as the ground can be worked thoroughly, covering about 4 inches in warm soil, and in wet soil 3 inches deep, cultivate to keep down weeds, and draw earth to the plants as they advance in growth.

We make a specialty of handling only first-class stock of the popular Maine-grown varieties, suited to this locality, at the proper season, March 1st to May 15th.

They are put up in original sacks of 165 pounds (or 2 3-4 bushels) each. Prices varying according to the market.

Red Skin or Cape May County Goodie—

We wish to call attention to this variety of potato which is planted long after all others are in the ground and growing up. Plantings are made of this variety from about July 15th to August 10th; it is late in maturing.

This potato is not planted in the early Spring; it will do well in most any soil, though light soil is preferable. Since this va-

riety sets abundantly it requires plenty of plant food to produce potatoes of good size.

They are good keepers and are most excellent for table purposes, especially in the late Winter and early Spring. It is a most valuable addition to the potato crop.

Irish Cobbler—Vigorous grower, ripens uniformly, and a good keeper.

Red Bliss—Early, great producer, handsome color and resistance to disease make it most popular.

Early Ohio—A standard early variety, shape oblong; quality dry, mealy.

McCormack—A very late heavy yielding potato, good Winter keeper.

Carmon No. 3—Most successful of the Carmon's, heavy yielder.

Early Rose—Still remains the standard early variety.

Beauty Hebron—Splendid keeper, pink, turning to pure white, early, productive.

Spalding No. 4—Earliest Rose, good cropper, fine appearance.

Sir Walter Raleigh—Big cropper, flesh white, fine quality.

Green Mountain—A popular main crop Potato.

Rural New Yorker—Second early large, smooth, white, wide as long, productive.

State of Maine—Another popular main crop Potato.

RADISH

Culture—Radishes must make a rapid growth to be crisp and tender. For early use seed should be sown in the hot-bed in drills 4 or 5 inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm south border, under the shelter of a fence, or building, if possible. A load of fresh sandy loam from the woods is better for the radish crop. As soon as the first leaves appear sprinkle with soot or ashes to save from the little turnip fly. One ounce will sow 150 feet of row.

The secret in sowing good radishes consists chiefly in the observance on the part of the grower of three points. First, they should be grown on light, quick soil. Second, they should be given plenty of water, and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly, and if not supplied with plenty of water are apt to be pithy.

French Breakfast—A very early variety. Oblong shape, mild and tender. The skin is a lively pink in color on the upper portion, but lower part is pure white. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

**Early Scarlet Globe**

Early Scarlet Globe—Somewhat larger than the early turnip-shaped varieties, being globular in form, and more of a medium between the early button and the later long sorts.

Is heat-resisting and of a brilliant scarlet color. Very showy. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Early Red Turnip Rooted—This is the old favorite and there are few that are better. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

White Tipped Scarlet Turnip—18 days—Fine French variety; scarlet bulb with white tip, very showy and ornamental. An extra early forcing sort. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

**White Box Radish**

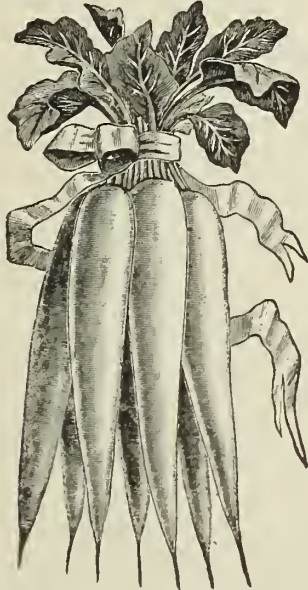
RADISHES—Continued

White Box—17 days—Fine for forcing or planting in the open ground, has short top, mild and sweet, a great favorite with Philadelphia market gardeners. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Half Long Scarlet—This variety, appreciated by many, is just the right size for table use, not too large, always tender and crisp. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

White Summer—A favorite turnip-shaped variety for the family garden. Round, smooth, crisp and mild. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

White Ladyfinger—25 days—In shape similar to Long Scarlet Short Top, sweet, mild, and brittle. Annually in greater demand as one of the best long radishes. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

**White Ladyfinger**

Iceberg—An extremely early white sort, well adapted for either forcing or open ground; slender and tapering in shape, very mild. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

White Strasburgh—A very popular variety. Pure white. Of tender quality and remains good for a long while. Matures in 30 to 35 days. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

**Long Scarlet Short Top (Improved)**

Early Long Scarlet Short Top (Improved)—The best standard variety for private gardens or market use, is brittle and crisp, and of quick growth; color bright scarlet, small top and is uniformly straight and smooth. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

WINTER RADISHES

(50 to 75 days, according to variety.)

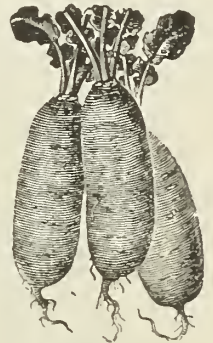
Winter Radishes are not appreciated as much as their merit warrants. They are easily grown, have few insect enemies and can be easily preserved through the Winter, and there is no vegetable which furnishes a more acceptable relish. While quick growth is not so essential for these as for the earlier sorts, they do best on a rich soil which has been made as fine and friable as possible. Sow late in Spring or during the Summer in rows 2 feet apart and thin the plants about four to the foot.

Half Long Gray Black—One of the latest as well as one of the hardiest of radishes, and is one of the best for Winter use; roots oblong, black, of large size and firm texture. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Round Black Spanish—An excellent Round Black Winter variety. Popular among Germans. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Scarlet China Winter—Form conical, of a bright rose color, flesh firm and pungent flavor. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

White China Winter—This Winter Radish is as solid and juicy as an apple; pure white flesh and delicious flavor—a very choice variety. Sown any time after July 1 to the middle of August. It will keep all Winter in prime condition, mild in flavor, brittle. Never gets woody as do most Winter varieties. Market gardeners have found it to be a splendid seller and have always made money with it. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

**Scarlet China Winter Radish****RHUBARB ROOTS (Victoria)**

(Ready from October to May 15th.)

Large Clumps—Each. 9c.; doz., \$1.00.

Extra Large Clumps—Each, 16c.; doz., \$1.75.
in lots of 100 or more, price on application.

SALSIFY OR VEGETABLE OYSTER

Sow early in the Spring, in deeply dug and richly manured soil, in drills 18 inches apart. Keep clear of weeds, and when up a few inches, thin out, so as to stand 4 or 5 inches apart. This is a hardy vegetable and can remain in the ground all Winter for early Spring use, but should be taken out before they start growing.

French—Produces a tapering straight root about a foot long. Pkt., 5c.; oz., 20c.; ¼ lb., 65c.; lb., \$2.25.

Sandwich Island—Preferred on account of its larger size, and absence of stringiness. Resembles a good-sized parsnip and is very mild and delicately flavored. Pkt., 5c.; oz., 20c.; ¼ lb., 65c.; lb., \$2.25.

SPINACH

The spinach is very hardy, wholesome and palatable, and makes a delicious dish for greens. Should be planted in rich ground. Sow in drills one foot apart, and commence thinning out when the leaves are an inch wide. For early Spring use, the seed should be sown middle of Autumn, and will require through the Winter a slight protection of leaves or straw. For Spring and early Summer use, sow as early as the ground can be tilled and at short intervals, if a succession is desired. Edible in 40 to 60 days.

**Bloomsdale—Savoy Leaf**

No matter what you may order from this catalog, you may rest assured of full value for your money.
Proven by test, our Seeds are best.

SPINACH—Continued

Bloomsdale—A superior variety of Savoy-leaved spinach, having a heavy re-curved bloated leaf of symmetrical form. Fine for outdoor planting in Spring or Fall, or under glass. Oz., 5c.; $\frac{1}{4}$ lb., 15c.; lb., 35c.

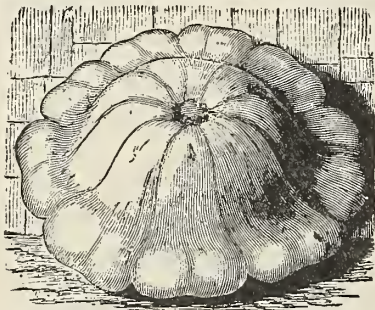
Norfolk—(Savoy)—Has a very erect habit of growth, and preferred by many on that account. Oz., 5c.; $\frac{1}{4}$ lb., 15c.; lb., 35c.

Long Standing—New large crimped fleshy leaved variety; stands two weeks longer than any other variety before running to seed. Best kind of seed sowing. Oz., 5c.; $\frac{1}{4}$ lb., 15c.; lb., 40c.

New Zealand—This variety endures heat and drought; excellent for Summer use; the leaves are small and thick. It is an enormous yielder, growing upright, one sowing can be picked from the entire Summer, a very distinct variety. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

SQUASH

Cultivate same as cucumbers or melons. The Summer varieties should be planted 4 or 6 feet apart each way, and the Winter sorts 8 feet. Three plants are sufficient for a hill.



Early White Bush (or Patty Pan)

Early White Bush, or Patty Pan—50 days—The earliest in maturing and very productive. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.35.

Early Golden Scallop Bush—Like the preceding, except being of a golden color. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.



Golden Summer Crookneck

Golden Summer Crook-Neck—40 days—The best of the Summer squashes, gold color, profusely covered with warty excrescences and of very superior flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Italian Vegetable Marrow (or Cocozella)—A large fruited, light green and yellow mottled variety, of oblong shape. Fine for frying, like egg plant. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Boston Marrow (or Squash Pumpkin)—A Fall and Winter variety, very popular, oval form, thin reddish skin, when ripe, bright orange color. Excellent for pies, very sweet, and a heavy cropper. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 80c.

Golden Hubbard—A very superior variety, flesh bright orange yellow; dry sweet and rich flavored, good keeper, boils or bakes exceedingly dry. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.



Hubbard

Warted Hubbard—Larger than the Golden, with deep green skin heavily warted. Very handsome in appearance, and an excellent keeper. It has the hardest shell of all the Hubbards. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Fordhook—A superb variety for pies; it cannot be excelled. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

TOBACCO

Pennsylvania Seed Leaf—Produces a very large, handsome leaf, which is a good quality. Extensively grown in Lancaster County, Pa. Pkt., 10c.; oz., 60c.; $\frac{1}{4}$ lb., \$1.75.

TOMATO

Culture—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. To have them very early the plants should be started in a hot-bed; transplant carefully, and cultivate well as long as the vines will permit. Tying to a trellis or stakes improves the quality. Ripen in 85 to 115 days, according to variety.

Earliana—One of the new standards of recent introduction, ripening ahead of other and later varieties, medium in size, fruit growing in clusters. Very solid, and a good acquisition. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Chalk's Early Jewel—The largest, smoothest and finest flavored, extra early bright red tomato. It is a heavy cropper, with tomatoes of large size and sweet flavor, producing throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are of good size, just right for market; are very solid and deep through, being almost round; color bright scarlet, ripening to stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds. The skin is strong enough to make it a good shipping variety. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Bonny Best—This is a superior early variety, over a week earlier than Earliana, and immensely productive, producing smooth, even-sized, globular-shaped fruit, of a rich bright scarlet color. Ripens evenly without spots or cracks, and is a valuable addition to the family or market garden. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Greater Baltimore—An excellent main-crop sort, producing large, solid, smooth fruit of a brilliant red color. It ripens evenly to the stem and is entirely free from ridges. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

John Baer—A few days earlier than Earliana, it yields a much heavier crop of larger, more uniform and more attractive fruits—generally returns the biggest profits of any extra early variety. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Acme—105 days—One of the most popular varieties; vines large, and produce abundantly until frost. Fruit in clusters, color maroon or reddish, with slight tinge of purple, invariably smooth and round, of good size and unusually solid, is a good shipper. Pkt., 5c.; oz., 30c.; $\frac{1}{4}$ lb., 90c.; lb., \$3.00.



Red Stone

Red Stone—115 days—A well known and favorite variety, rich color, solid flesh, and desirable in every way. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Dwarf Stone (Tree Tomato)—Large, red, smooth and solid; the stalk is upright with very dense foliage protecting fruit from heat of sun. A most desirable tomato. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Golden Queen—Well known as one of the best; vines of medium size, but producing large quantities of fruit, which is large, smooth, and bright yellow in color. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Beefsteak or Ponderosa—One of the best; color maroon, solid flesh, very productive. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.25; lb., \$5.00.

Red Rock—This is one of the finest large red Tomatoes ever introduced. It ranks among the latest varieties, requiring about 110 days from seed-sowing to ripe fruit. It is very solid and free from any excess of water; smooth and of a very fine and red color. Superior in texture and flavor. It is an extraordinary heavy producer and excellent shipper. Twenty-five tons of fruit have been grown to the acre. It is especially

TOMATO—Continued

recommended to truckers and growers for canning factories, as it is very showy and productive. It has a very strong, vigorous vine protecting the fruit from sunscald. Pkt., 5c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

SMALL FRUITED VARIETIES

Yellow Plum—Fruit plum-shaped, of a clear, deep yellow color; flesh yellow and finely flavored. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Yellow Husk, or Ground Cherry—Used for preserving and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort which is scarcely edible. Excellent for making pies. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Peach—Fruit resembles a small peach in size and shape. The color is a light terra cotta red. Skin and flesh thick. Used principally for preserving and table decoration. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Red Cherry—Fruit the size of a large cherry, perfectly round and smooth. Used for preserving. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

TOMATO PLANTS

Ready about May 1st.

Large quantities matter of correspondence.

Improved Stone, Bonny Best, Greater Baltimore, Chalk's Early Jewel Dwarf Stone, Sparks' Earliana, Livingston's Beauty, Yellow Egg.

Pot Grown—Doz., \$1.00; 100, \$5.00.

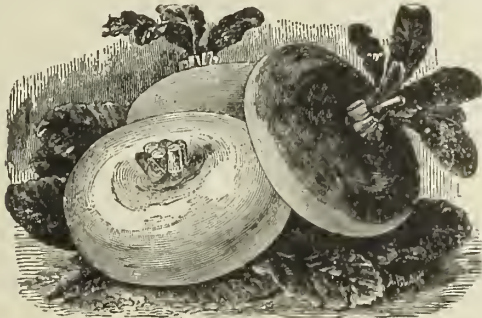
Transplanted—Doz., 40c.; 100, \$1.50.

All plants packed in live moss, to insure long shipment. No plants shipped on Saturday.

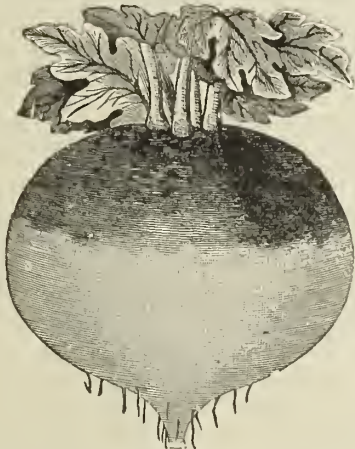
TURNIP

(Maturing from 60 to 90 days, according to variety and season.)

Early Flat Dutch—This is a quick growing, strap-leaved, white variety, resembling the Flat Red Top excepting that its top is white. A favorite sort for either the market or family garden. Has a mild, pleasant flavor, and is as desirable in every way as the Red Top Flat. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

**Early Flat Red or Purple Top**

Early Flat Red or Purple Top—(Strap Leaved)—Very similar to the preceding except in color, being purple or dark red on top; form round, flat, with but few leaves, which are of upright growth. This is the standard variety, and there is none better for general purposes. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

**Large Purple Top Globe**

Cow Horn—This variety is carrot-shaped, and grows nearly half out of the ground; is pure white, except slight shade of green at top. It is well flavored, of rapid growth, and seems to

be increasing in flavor every year. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Large Purple, or Red Top Globe—An excellent variety, globe shaped and heavy cropper; this variety is rapidly taking the lead among growers for market garden purposes; it is also a good one for stock. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 65c.

Yellow, or Amber Globe—(Strap Leaved)—This is one of the best of the rough leaved sorts, for either table use or for stock; yellow, fine grained and sweet; hardy, keeps well, is a good cropper, and grows to a very large size. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Golden Ball—A small yellow turnip of second size. Early, and a good keeper. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Yellow Aberdeen (Green Top)—This is a very nutritious turnip; flesh pale yellow, tender and sugary; is a good keeper, hardy and productive. It is an old favorite, and for stock purposes hard to beat. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Yellow Aberdeen (Purple Top)—Very hardy and productive, a good keeper; globe shaped. Color pale yellow, with purple top. Very firm in texture, and closely resembling the rutabaga in good keeping qualities. Good either for table or stock. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

**RUTABAGAS
SWEDISH TURNIP****Ruta Baga**

Kelway's Perfect Model—We cannot speak too highly of this new but justly celebrated Swede brought out by Kelway, being a fresh selection of a heavy cropping rutabaga with a small purple top, free from that stringiness found in some. Tender and sweet, the absolute acme of perfection.

Although a long keeping variety, it is remarkable for being the first in coming to maturity.

Market gardeners should not neglect the opportunity to secure this money maker. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Improved Purple Top Yellow Swede—This is the standard and most important now cultivated for stock purposes; noted for rapid growth, large size and nutritious quality, and cannot be too highly recommended. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

White Fleshed Purple Top Rutabaga—This differs mainly from the preceding in color; possesses most of the good qualities of the yellow, but is of slightly milder flavor, is not as valuable for stock as the yellow. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

SWEET, MEDICINAL AND POT HERBS

	Pkt.	Oz.	¼ Lb.	Lb.
Aisne	\$0.05	\$0.10	\$0.30	\$1.00
Sweet Basil .....	.05	.15	.45	1.50
Caraway .....	.10	.15	.25	.75
Chervil .....	.05	.10	.30	1.00
Coriander .....	.05	.10	.20	.60
Dill .....	.05	.10	.25	.75
Fennel-Florence .....	.05	.15	.45	1.50
Lavender .....	.10	.25	.90	3.00
*Sweet Marjoram .....	.10	.25	.85	3.00
Rosemary .....	.10	.40	1.25	5.00
*Sage .....	.10	.45	1.25	5.00
*Summer Savory .....	.05	.20	.60	2.00
*Thyme .....	.10	.45	1.50	5.00
Wormwood .....	.05	.20	.70	2.50

Those marked with (*) are perennial, and when once obtained in the garden, may be preserved for years with a little attention. Soil should be carefully prepared and cultivated, as the young plants are delicate and easily choked out by weeds. Sow in beds in April, and set plants out in June, they should be cut when in bloom, wilted in the sun, and then thoroughly dried in the shade.

NURSERY STOCK

SEND FOR OUR NURSERY STOCK CATALOGUE

IN SEASON WE CARRY FRUIT TREES AND
BERRY BUSHES IN STOCK

Strawberries—early and late varieties.

Blackberries—In strong plants, rust-proof.

Gooseberries—All varieties, in one and two-year plants.

Currants—Many varieties, including Boskoop Black Giant.

Raspberries—The Ranere or St. Regis and various other kinds.

Grapes—All colors, early and late.

Hedge plants—California Privet, Berberis Thunbergis, Golden Privet.

Evergreens, Roses, Shade Trees, etc.

DISEASED LAND AND HOW TO CURE IT, WITH FINAL WORD REGARDING NATURAL HUMUS

We have had this question put to us so often that we feel justified in saying a few words on the subject, based on our own observations and testimony of others.

A productive soil is not a dead body, but a living one, and as such is, like human life, animal and plant life, subject to many diseases, and a practical farmer should know what kind of medicine to apply to cure the various ailments—for instance:

We Have Land Suffering From Consumption—

Sickly looking and pale in color—such land will not hold water; it is poor in vegetable matter—humus—and some farmers will claim that such land cannot be made to hold manure or fertilizer, and consequently cannot be cured. This is wrong; consumptive land can be cured by increasing the water holding capacity of same.

Try This Experiment—

Fill a funnel with this consumptive sandy soil, pour some water on this soil in funnel, note how quickly the water will filter through soil and funnel, also note the small amount of water retained in soil; now take same quantity of same soil, mix with one-third quantity of clay, put in funnel and pour water on it as before, and you will find the soil will hold nearly double the quantity of water as in the first sample before running through the funnel; now again, take the same soil with the one-third clay, and add one-third quantity of vegetable matter or humus, add water as before, and you will note that this soil will hold nearly three times as much water as the first sample, and about twice as much as the second; and when you remember that plants cannot take solid foods—plant foods must be soluble in water—you can readily see how important it is to increase the water holding capacity of your soil, as before mentioned. In curing your consumptive land, you cannot obtain the clay mixture through deep plowing, give the land

plenty of humus through cow peas and german clover, and should it get sour through an over abundance of vegetable matter, give an application of from one to two thousand pounds of lime, and same will promptly correct the acidity.

Other Lands Suffer From Torpid Liver—

This is generally a heavy clay soil, with little sand and no humus, and always a closed surface after a rain; plants in this land die from suffocation, because the air cannot penetrate to the roots. Doctors prescribe calomel for human beings suffering from this disease—the farmer should use the subsoil plow, plenty of lime, german clover and cow peas, and if his bank account allows, he should tile drain such land and make of it a most productive grass and clover land. In sowing grains, grass or clover on such land the surface should not be finely pulverized, but left open in a lumpy condition, to prevent the surface becoming hard and shining after the rain.

Remember that land, being a live body, must breathe, the pores must be kept open, and a closed surface on soil is as detrimental to its physical condition as closed pores are to the human body. By allowing the surface of your land to bake and get hard, you destroy the capilar attraction of the soil, the pulsating action of its breathing, which means its capacity and ability to breathe and draw the moisture, not only from the atmosphere, but from the subsoil as well.

WHAT HUMUS DOES FOR FLOWERS

The most recent tests with various mixtures of soil and humus have given highly satisfactory results.

Humus has no odor.

Mix it at rate of three parts soil to one of humus.

Flowers potted for house blooming should have mixture like above and will have a richness of bloom and vigor of foliage such as every enthusiast strives to secure.

CLASSIFIED LIST OF EDGING, BORDER AND CLIMBING PLANTS

There are no more satisfactory flowers grown than those from seed, especially the easily grown and brilliant flowered ones, fully listed on following pages. Shrubbery and other hardy plants have their place, but a paper of seed, costing but a very small sum will furnish a large number of plants giving the greatest amount of bloom for the minimum of cost. We give a list of those best suited for either—Edging or Border Plants, Bedding or Grouping and Climbing Plants or Vines.

Cannas do well in almost any kind of soil, but they well repay liberal treatment. For the best results they should be planted in good loam that has been well mixed with an abundant supply of well rotted stable or other manure. The beds should be spaded 2 feet deep, or more, and the soil well pulverized. Water should be applied abundantly at all times, but good drainage is essential.

Cannas are most effective when planted in masses, either alone or in combination with salvia (scarlet sage) and bordered with coleus or other dwarf-growing bedding plants. They are also frequently used with some of the tall-growing ornamental grasses, with which striking combinations can often be secured. They do best in sunny situations, and should be set out about 2 feet apart each way.

Edging or Border Plants

Aquilegia
Ageratum—(Dwarf)
Alyssum—Little Gem
Candytuft
Mignonette
Myosotis
Nasturtium (Dwarf)
Pansy
Portulaca
Snap Dragon
Sweet William

Bedding or Grouping

Autirrhinum—(Tall)
Asters

Centaurea—Bachelor's But-

ton
Balsam—(Lady Slipper)
Calendula—Pot Marigold
Calliopsis
Campanula
Castor Oil
Carnations
Cosmos—Dwarf or Tall
Coxcomb
Delphinium
Digitalis
Eschscholtzia
Four O'Clock
Gaillardia
Heliotrope
Helichrysum

Hollyhocks

Kochia
Larkspur
Mignonette
Marigold—(Dwarf or Tall)
Phlox
Petunia
Pinks
Poppy
Salvia
Stocks
Sweet Sultan
Sweet William
Verbena
Wallflower
Zinnia

Climbing Plants or Vines

Balloon Vine
Balsam Apple
Canary Birdflower
Clematis
Cypress Vine
Echinocystis
Gourds
Japanese M. Glory
Convolvulus M. Glory
Hyacinth Bean
Ipomea—Moon Flower
Nasturtium—Tall
Sweet Peas

MINGLE'S

SELECTED FLOWER SEEDS

Every year we carefully revise our list of flower seeds, retaining the superior varieties and rejecting the undesirable ones. Annuals attain full growth from seed, flower and die in one year. Biennials grow from seed one year, bloom and die the next; though some varieties bloom the first season when sown early. Perennials last for several years, blooming annually after the first season. Some varieties flower the first season if planted early in gentle heat.

The letter "A" following variety designates the Annuals; "B," the Biennials; "P," the Perennials; "H.A.," Hardy Annuals. P. A. denotes Perennials which can be treated as Annuals.

Prices on Flower Seeds include postage. Every flower seed is priced according to general rule of all seed houses, in either 5c. or 10c. packets. On larger lots we quote on application, such as ounce, ¼ lb. and 1 lb. quantities. We make a special price, however, on Sweet Peas and Nasturtiums, per notation found on page 27. Dahlias, Gladiolus, Lilies, Cannas, Paeonies and various other bulbous and root plants are fully described on following pages.

Ageratum (Floss Flower)—One of the very best bedding plants from early Summer till frost; used also for borders, or planted with geraniums, coleus and cannas. Imperial Dwarf Blue. "H.A." Pkt., 5c.; ¼ oz., 20c.

Alyssum (Little Gem)—The dwarf variety; fine for beds or edging in Summer, or pots and boxes in Winter. Will bloom the entire season, until hard frost. "A." Pkt., 5c.; large pkt., 10c.; ¼ oz., 25c.; oz., 75c.

Antirrhinum (Snap Dragon)—This is one of our finest perennials. If planted early, will flower the first year as an annual. The flowers are brilliant and beautifully marked; fine for cutting. Giant Flowering Mixed. "P.A." Pkt., 10c.; ¼ oz., 25c.

Aquilegia (Columbine)—Flowers beautifully in Spring, the flowers rising two feet above the fernlike foliage. Used for cut flowers. Single Fine Mixed. "P." Pkt., 5c.; ¼ oz., 20c.

Aster (Semple's Branching)—Easily raised from seed and make attractive Autumn-flowering border plants. This superb strain is of American origin, and is especially adapted to our climatic condition. Mingle's Special Mixed. "A." Pkt., 5c.; large pkt., 10c.; ¼ oz., 45c.; oz., \$1.25.

Balsam or Lady Slipper—One of the oldest and best known summer-blooming annuals, of easy culture. Desirable for garden or pot culture. The soil should be of the richest and best quality. Set them about 15 inches apart, and give them plenty of manure-water. Tender annuals. Double Camellia Flowered Mixed. "A." Pkt., 5c.; ¼ oz., 25c.

Balloon Vine—A rapid climbing ornamental plant, bearing pretty white flowers, whose seed pods swell in shape like balloons. "A." Pkt., 5c.; oz., 25c.

Calendula (Scotch Marigold)—Showy, free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders and continuing in bloom until killed by frost; valuable also for pot culture; 1 foot. Double Finest Mixed. "A." Pkt., 5c.; oz., 25c.

Calliopis—This hardy annual is another of the garden's great forces in yellow, strengthened with rich red-maroons and browns. Sow in the open ground in spring, and, in thinning or transplanting, give the plants plenty of room to spread. Their tall, slender habit makes neat staking and tying necessary. Fine for cutting. Tall Fine Mixed. Pkt., 5c.; ½ oz., 20c.

Celosia (Cockscomb)—We prize and plant the Cockscomb as an odd and picturesque decorative feature of the garden. Annuals of easy culture, the bright red and crimson varieties are most effective, both in gardens and in winter bouquets, for which they are cut before fully ripe and dried in the house. The dwarf varieties make novel and attractive borders; the tall ones form striking groups. Transplanting into rich soil about the time the combs begin to form makes the flower-heads much larger. They are bright from midsummer until frost. Cristata. Giant Mixed. "A." Pkt., 5c.; ¼ oz., 30c.

Campanula (Canterbury Bell)—Red, White and Rose. An old-fashioned favorite with all. Of easy growth and showy. A hardy biennial. Double Fine Mixed. Pkt., 5c.; ¼ oz., 50c.

Candytuft (Iberis)—The Candytufts are among our best hardy annuals for edgings, bedding, massing or rockeries, and for cutting. Several of the varieties are fragrant, and all are profuse in bloom. Sow outdoors in April, and thin well when the plants grow about an inch. Sow again in a month, and late in July for fall flowers. Give rich soil, and water freely. Fine Quality Mixed. "A." Pkt., 5c.; oz., 25c.

Canary Bird Vine—A rapid-growing summer-climbing annual, 10 to 15 feet high; it will cover trellis work in the most graceful manner, producing hundreds of pretty winged, bright yellow flowers. "A." Pkt., 5c.; ½ oz., 15c.

Carnation—Always in demand and not hard to grow. Have a delightful clove fragrance. Half-hardy perennials, flowering the second year from seed, with exception of the "Marguerite" variety, which will bloom in four months from time of sowing the seed. Should not be planted where water stands in Winter. Mingle's Fine Mixed "Marguerites." Pkt., 10c.; ¼ oz., 50c.

Centaurea (Cornflower)—Of easy culture. Abundant bright flowers. Sow early outdoors and thin plants to 6 or 8 inches,

or raise in boxes indoors and transplant when large enough. **Imperialis Gigantea**. Finest Mixed. "A." Pkt., 5c.; ¼ oz., 25c.

Cosmos—Beautiful Summer and Autumn blooming plants. Flowers a beautiful pure white, pink and crimson, furnishing an abundance of cut blooms. Late Mammoth Flowering, Mixed. Pkt., 5c. Early Dwarf Flowering Mixed. Pkt., 10c.; ¼ oz., 15c.

Clematis—Hardy perennial climbers; fine for arbors, verandas, etc., bearing clusters of beautiful fragrant white flowers. **Paniculata**. "H." Pkt., 10c.; ¼ oz., 30c.

Cypress Vine (Ipomoea Quamoclit)—A half-hardy, very beautiful, delicate, fern-like foliage plant, and masses of bright crimson and white flowers. Plant about the 10th of May; 15 feet. Mixed. Pkt., 5c.; oz., 30c.

Castor Oil Bean (Ricinus)—Tall majestic plants with palm-like leaves. Fine for backgrounds and centers for beds of foliage plants. All the best sorts, including the bronze, copper-brown, green and purple leaved kinds. **Zanzibariensis**, **Splendid Mixed**. Pkt., 5c.; oz., 20c. All Sorts, Mixed. Pkt., 5c.; oz., 20c.

Delphinium (Larkspur)—This is one of the best known garden flowers. By careful attention to selection and cultivation much improvement has been made in color and size. **Chinese Blue**. "P.A." Pkt., 10c.; ¼ oz., 40c.

Dianthus (Garden Pink)—These flowers are without a superior among annual garden plants. Bloom continually all summer long, and are most beautiful and lasting cut flowers. Of easy culture and bloom the first year from seed. Very fragrant. **Chinensis**. Double Fine Mixed. "A." Pkt., 5c.; ¼ oz., 15c.

Digitalis (Foxglove)—Highly ornamental and handsome plants, of stately growth. Thrives best in half shady places. Height, three to five feet. **Gloxiniiflora**. Mixed. "P." Pkt., 5c.; ¼ oz., 25c.

Echinocystis (Wild Cucumber Vine)—The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather. Lobate "A." Pkt., 5c.; oz., 25c.

Eschscholtzia—Commonly called California Poppy. The state flower of California. This much esteemed hardy annual is very bright and rich in its pure tints of yellow, orange, etc. The plants average about a foot in height, with silvery foliage, and produce their large, poppy-like flowers from early spring until frost. They are most effective when grown in beds of considerable size, over which the seed may be sown broadcast thinly and lightly. All colors. Fine Mixed. "A." Pkt., 5c.; oz., 30c.

Gallardia—One of the most showy and brilliant of garden flowers, fine for bedding and cutting, producing large flowers of rich shades throughout the summer. **Lorenziana**. Double Mixed. "A." Pkt., 5c.; ¼ oz., 25c.

Gourd (Ornamental)—Rapid growing annual climbers for covering arbors, fences, etc., with ornamental foliage and curious shaped fruit.

Calabash or Dipper—Very useful. Pkt., 5c.; oz., 25c.

Egg-Shaped—White like an egg. Pkt., 5c.; oz., 25c.

Hercules Club—Club shaped; 4 feet long. Pkt., 5c.; oz., 25c.

Luffa (Dish Rag or Bonnet Gourd)—Pkt., 5c.; oz., 25c.

Orange Shaped Mock Oranges—Pkt., 5c.; oz., 25c.

Pear-Shaped—Striped; very showy. Pkt., 5c.; oz., 25c.

Helianthus (Sunflower)—The single annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden, borders or among shrubs. Plant early in a sunny place and they will come into bloom early in the summer and keep up a constant supply of flowers until cut down by severe frosts in the fall. Single and Double Mixed. Pkt., 5c.; oz., 25c.

Heliotrope (2 ft.)—Heliotrope is a universal favorite on account of its delightful fragrance and duration of bloom, flowering equally well as bedding plants in Summer, or as pot plants in the home during the Winter. Seed sown in the Spring makes fine plants for bedding out, and are as easily grown as Verbenas. The colors of the blossoms range from white through all shades of violet to the deepest purple. **Mammoth Mixed**. Flowers of great size and ranging in shade from dark blue to lilac. Pkt., 10c.; ¼ oz., 40c.

We Pay Postage on Flower Seeds.

Helichrysum (Eternal Flowers)—A most popular, hardy annual; the flowers are large and the colors bright; highly prized for winter bouquets. Flowers intended for drying should be gathered when partially unfolded, and suspended with heads downward in a cool and airy place; 1 to 2 ft. Monstrosum. Mixed. Pkt., 5c.; ¼ oz., 25c.

Hollyhock—A most majestic hardy plant, giving a pleasing effect in any garden. Usually planted among shrubbery, or to give a background for other flowers. The strain we offer is considered the very best. Chaters. Superb Double Mixed. "P." Pkt., 10c.; ¼ oz., 40c.

Hyacinth Bean (Dolichos)—Very rapid-growing, hardy annual climber, bearing pea-shaped blossoms and ornamental seed pods. Fine for covering screens, etc.; 10 ft. Lablab. White and Purple. Pkt., 5c.; oz., 20c.

Kochia (Summer Cypress or Mexican Fire Bush)—An easily grown annual, which grows into a cypress-like hedge, with feathery green foliage; at the approach of autumn the foliage turns to a deep red color; 2 to 3 feet. "A." Pkt., 5c.; ¼ oz., 25c.

Larkspur—See Delphinium, page 25.

Marvel of Peru or Four O'Clock—Mixed Dwarf (white and yellow). A popular free flowering garden sort. Thrives in every garden. Plant 1 to 1½ feet apart. Jalapa. Fine Mixed. "A." Pkt., 5c.; oz., 20c.

Marigold—A hardy annual, shrubby plant, in dwarf and tall varieties, growing from 6 inches to 3 feet high. Foliage bright green, deeply cut, and graceful. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or background work, and the dwarf varieties for borders. No flower garden seems complete without this fine old-fashioned plant. "A." African. The best tall variety with large double blossoms. Pkt., 5c.; ¼ oz., 20c. Dwarf French. Double Mixed. Pkt., 5c.; ¼ oz., 20c.

Mignonette (Reseda Odorata)—Seed of this popular hardy annual can be sown at any time, and if successive sowings are made, its fragrant, modest-colored flowers may be gathered outdoors until November. Sow in pots or boxes under glass in February or March, and thin or pot off the seedlings to make good plants for bedding out in April. Choice Mixed. "A." Pkt., 5c.; oz., 20c.

Moonflower (Ipomoea mexicana)—Of all climbers for garden and greenhouse these are the quickest and most luxuriant in growth. Ipomoeas grow so easily from annual sowings that it is no longer thought necessary to winter over roots or young-cutting plants under glass. The large, thorny seeds of some varieties should be soaked in hot water before planting. For early flowers sow in hotbeds or pots and boxes under glass, and transplant to rich, deep soil in summer quarters as soon as danger of frost is over, when sowings may also be made in the open ground. Nothing finer for porches, trellises, etc.

These are very hard-seeded, and, in order to hasten germination, a notch should be filed in the seed before planting. Grandiflora Superba. Pkt., 10c.; ½ oz., 30c.

Morning Glory (Ipomoea)—The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.

Convolvulus Major—Tall, choice, single mixed; all colors. "A.C." Pkt., 5c.; oz., 15c.

Imperial Japanese—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage. Pkt., 5c.; oz., 25c.

Momordica (Balsam Apple)—A climbing annual, growing about 10 feet long. Has graceful and ornamental foliage, yellow flowers and warted golden yellow fruit, with large carmine-red seeds. Balsam Apple and Balsam Pear are climbers which thrive. Balsamina, Apple Shape. Pkt., 5c.; oz., 50c.

Charantia or Balsam Pear—Same as the Balsam Apple, but fruit is pear-shaped. Pkt., 5c.; oz., 50c.

Myosotis (Forget-Me-Not)—"Pulustris." Succeeds best in a shady, moist situation. Permanent and hardy, if given a slight protection through the winter. "P." Pkt., 10c.; ¼ oz., 45c.

Nasturtium—Our Dwarf varieties are selected from the largest and most beautiful flowering stock. Our tall varieties cannot be excelled as handsome climbers for trellises and verandas. The seed when still green may be used for pickling.

Dwarf Mixed, pkt., 5c.; oz., 15c.; ¼ lb., 50c.; per lb., \$1.50. Tall Mixed, pkt., 5c.; oz., 15c.; ¼ lb., 50c.; per lb., \$1.50.

Petunia—A beautiful flowering plant well adapted either for outdoor or house culture. Begins to flower early, and continues to the whole season. Finest Single Mixed. "A." Pkt., 5c.; ¼ oz., 30c.

Pansy—No description is needed of these little favorites, and it would be hard to find a garden whose charm is not in a large measure dependent upon their marvelous coloring.

Giant French Mixed—The largest flowering type of Pansy called the French strain. The top petals are larger than the three lower ones and are beautifully marked. The plants are vigorous, compact growth, with immense, three-blotched flowers. "P." Pkt., 10c.; ¼ oz., 75c.

Phlox—One of the best known garden plants. Brilliantly colored flowers, selected from the best strains. Will grow anywhere in a sunny location. Drummond. Tall Mixed. "A." Pkt., 10c. Decussati. Tall Fine Mixed. "P." Pkt., 10c.; ¼ oz., 50c.

Popples—Showy, large, brilliant colored flowers, growing freely in any garden soil. Produce a fine effect in clumps or beds. Shirley. The finest single. "A." Pkt., . Paecony-flowered. The finest double. Pkt., 5c.; ¼ oz., 15c.

Portulaca—Low-growing or creeping tender annual, 6 to 8 inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground.

Select Single Mixed—This is an extra fine strain with very large blossoms and splendid colors. "A." Pkt., 5c.; oz., 60c.

Choice Double Mixed—Flowers perfectly double; of the most brilliant shades of color. Pkt., 10c.; ¼ oz., 30c.

Ricinus—See Castor Oil Bean.

Salvia (Flowering Sage)—The well known scarlet flowered bedding plant, blooms from July till frost. Blooms the first year from seed sown early in hotbeds or indoors, and transplanted when the weather becomes warm enough. Splendeus. A fine strain. Pkt., 10c.; ¼ oz., 60c.

Sweet Peas (Lathyrus Odoratus)—Mixed. The flowers of the Sweet Peas are among the most useful and beautiful of our hardy annuals. We offer our Special Selections of seed of these popular flowers, including only seeds of the brightest and largest flowering, free blooming, long stemmed sorts. All colors mixed.

Choice Selection, pkt., 5c.; oz., 10c.; ¼ lb., 30c.; per lb., 90c.

"Spencer" Selection, pkt., 10c.; oz., 25c.; ¼ lb., 75c.; per lb., \$2.50.

Stock (Ten Weeks)—An annual, used largely for bedding purposes, and grown in pots for Spring flowers. Has long spikes of bloom. White, pink and crimson; single and double. Very fragrant. Giant Early Flowering Mixed. "A." Pkt., 10c.; ½ oz., 50c.

Sweet William—A beautiful class of hardy, free blooming plants of extreme richness and diversity of colors. Produces a fine effect in beds or mixed flower borders. Choice Single Mixed. "B." Pkt., 5c.; ¼ oz., 15c.

Verbena Hybrida—Yellow, blue and white. Flowers large and brilliant. Selected seed, from the best blooming sorts. Sow early indoors or in hotbed, and transplant in May, or sow in the open in May, for July blooming. Extra Choice Single Mixed. "A." Pkt., 5c.; ¼ oz., 20c.

Wallflower—This is a fine bedding plant, but it is more often grown as a pot-plant and for this purpose is well adapted. The flowers are very fragrant and usually of various shades of yellow, brown and reddish brown. An old-fashioned flower which is always popular. Sow early in the year in boxes and transplant. Special Fine Mixed. "F.A." Pkt., 5c.; oz., 25c.

Wild Flower Garden—A splendid mixture which embraces a large number of varieties of easy growing, beautiful, and interesting flowers, which will furnish a profusion of bloom throughout the entire Summer and Autumn. Pkt., 5c.; oz., 25c.

Zinnia (Youth and Old Age)—An annual of handsome and brilliant appearance. Sow early, indoors or in hotbed, and transplant. The bloom continues throughout the Summer. Giant Flowering. Extra Mixed. Pkt., 10c.; ¼ oz., 40c. Dwarf Flowering. Fine Mixed. Pkt., 5c.; ¼ oz., 20c.

DOUBLE HERBACEOUS PAEONIES

DOUBLE PAEONIES are too well known to require description. Their popularity is due to the great improvement in them in recent years, their easy culture, the handsome appearance of the plant, and the brilliant and striking effect of their massive, finely-formed and richly-colored flowers. The attention given to them, in Europe and in America, has resulted in the production of many notably fine new varieties. Among hardy, herbaceous perennials, the Chinese paeonies rank about first for lawn or flower border, or shrubbery decoration.

Paeonies require a sunny location and should be planted in good rich soil, care being taken that the crowns are covered with not more than 2 inches of soil. If wanted by Parcel Post add postage; weight, 3 lbs. per dozen.

DUCHESS DE NEMOURS—Outside petals white. Centre, lemon yellow. 40c. each; \$4.00 per dozen.

DUCHESS D'ORLEANS—Large carmine pink. Centre, soft pink shaded salmon, perfect. 40c. each; \$4.00 per dozen.

LARGE FLOWERING CANNAS

CANNAS do well in almost any kind of soil, but they well repay liberal treatment. For the best results they should be planted in good loam that has been well mixed with an abundant supply of well-rotted stable or other manure. The beds should be spaded 2 feet deep, or more, and the soil well pulverized. Water should be applied abundantly at all times, but good drainage is essential.

Cannas are most effective when planted in masses, either alone or in combination with salvia (scarlet sage) and bordered with coleus or other dwarf-growing bedding plants. They are also frequently used with some of the tall-growing ornamental grasses, with which striking combinations can often be secured. They do best in sunny situations, and should be set out about two feet apart each way.

All of the Following are Dormant Roots

Bronze-Foliaged Cannas

Red Colors

KING HUMBERT—The most popular Canna. Great orange-scarlet flowers surmount the vigorous dark bronze foliage throughout the season; 5 feet. Each 15 cts.; \$1.60 per dozen.

WYOMING—A splendid bedder, with bright orange flowers, on 6 ft. massive purplish-bronze foliage, making a strong contrast. Each 15 cts.; \$1.60 per dozen.

REMARKABLE—This effective variety stands out boldly among all other sorts not only on account of its height (6 feet), but because of the beautiful scarlet-carmine trusses of bloom surmounting the rich green-bronze foliage. 30 cents each; \$3.25 per dozen.

POPPY—Intense Poppy-red. Large perfect florets in good trusses over greenish-bronzy foliage; rich and effective; 5 feet. 50 cents each; \$5.00 per dozen.

HARMONY—Great clusters of good-sized, well-formed Geranium-red flowers arranged on good stems in such a manner as to give the trusses an almost globular appearance. Carmine-bronze foliage; 3½ feet. 15 cts. each; \$1.60 per dozen.

Yellow Colors

SAN DIEGO—Chinese-orange or Persian yellow. The crimped petals are remarkable for substance, which enables them to withstand the hot summer sun without wilting. Another charm is the dark bronze color of the buds, which harmonize with the rich bronze foliage; 4 feet. 25 cts. each; \$2.50 per dozen.

Green-Foliaged Cannas

Pink

CITY OF PORTLAND—A wonderful bright rosy-pink, much deeper in color than Mrs. Alfred Conard or Hungaria, a free-flowering vigorous grower; 3½ feet. 35 cts. each; \$3.50 per dozen.

MRS. ALFRED CONARD—One of the very best Cannas in commerce today. The large exquisitely shaded salmon-pink flowers are produced in great abundance on robust upright stalks; 4 feet. 35 cts. each; \$3.50 per dozen.

UHLBERG—Forms bushy plants 3 feet high, with good-sized flowers of a soft rosy carmine with creamy yellow throat and broad margin of same color. Very free flowering. 35 cts. each.

SENSATION—To get a sensational color tone in a pink Canna is particularly noteworthy. Our first impulse was to call it "La France," because the color called to mind the La France Rose. But the tone is even cleaner and purer, it being a lovely pale-rose. The foliage is a beautiful glaucous-green, the plant dwarf and compact; 3 feet. 85 cts. each.

MISCELLANEOUS BULBS AND PLANTS

DOUBLE PEARL TUBEROSES

One of the most delightfully fragrant and beautiful of the summer flowering bulbs. For early flowers they can be started in February or March in the greenhouse or hotbed, and for a succession they can be planted at intervals as late as July. For flowering in the open border plant about the middle of May, or as soon as the ground becomes warm. Extra large bulbs, 10 cts. each; per dozen, 85 cts.; per 100, \$6.00.

BLEEDING HEART

SPECTABILIS—An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive; it is used largely for forcing, and is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. May; 2 feet. Each 30 cts.; dozen \$3.15.

White

EUREKA—Our own introduction and the best white Canna for all purposes. The large substantial flowers are very freely produced on strong, vigorous plants; 4½ feet. 15 cts. each; \$1.60 per dozen.

FLAG OF TRUCE—A large-flowered, creamy-white with faint pink dots on each petal. The general effect is white. Not as white nor as tall as Eureka, but quite distinct and valuable; 4 ft. 35 cts. each; \$1.60 per dozen.

Red Colors

CARMINE BEAUTY—Deep, bright carmine flowers, freely produced high above the heavy dark green foliage, which has a narrow red margin. The flowers, while not as large as those of Olympic, are of a much brighter and more pleasing tone; 4½ feet. 15 cts. each; \$1.60 per dozen.

GENERAL MERKEL—One of the earliest and freest-flowering varieties, holding its flowers well above the foliage; in color a brilliant scarlet, suffused with orange, the base and edge of petals marbled golden yellow; 4 feet. 25 cts. each; \$2.75 per dozen.

METEOR—Magnificent bedding variety with massive erect trusses of deep blood-red flowers, produced with a freedom that leaves nothing to be desired. The best deep red large-flowered Canna; 5 feet. 15 cts. each; \$1.60 per dozen.

DAZZLER—Continuously through the season the dark green foliage of this variety is hidden beneath the mass of clusters deep fire-red flowers. The intensity of coloring and freedom of blooming, coupled with compact habit, make this variety the peer of the best for bedding purposes; 3½ feet. 25 cents each; \$2.75 per dozen.

THE PRESIDENT—When the Canna Firebird was introduced its immense florets and bright red color insured its immediate popularity. In offering the President we may best describe it as possessing all the good qualities of Firebird, enhanced by extraordinary vigor and perfect healthy foliages. It grows to a height of 5 feet, and produces its immense trusses of giant florets in great profusion. The most sensational introduction of recent years. 35 cts. each; \$3.50 per dozen.

Yellow Colors

GOLDEN EAGLE—A grand clear golden yellow, of free upright growth. The flowers are produced in large clusters well above the foliage; 4 feet. 35 cents each; \$3.50 per dozen.

FAVORITE—This is the best yellow Canna spotted with red dots. The yellow is intense, and the dots, not too pronounced, add to the beauty of the flowers without detracting from the golden mass. 35 cts. each; \$3.50 per dozen.

CALADIUM (Elephant's Ear)

A very effective plant, and suitable for a single plant on the lawn, masses in beds, or for margins of water, its leaves often attaining the length of 3 feet by 20 inches wide. First size, 20 cts. each; \$2.00 per dozen; second size, 15 cts. each; \$1.50 per dozen; postpaid; extra large bulbs, too large to mail, 30 cts. each; per dozen, by express, \$3.50.

MADEIRA OR MEXICAN VINE (Hardy)

The tubers if planted deep and protected during the winter, are hardy. The leaf is a very deep green, and grows very dense; the flower is very small, white in color. Strong roots, 10 cts. each; single roots mailed free; per dozen, 40 cts. (by mail, 50 cts. dozen).

DAHLIAS

DAHLIAS will grow in almost any kind of soil, but it should not be too rich. The soil should be plowed or spaded deeply as early as possible and then again just before planting. If it is already fertile, use no manure or fertilizer. If it is poor, broadcast any kind of manure before the first spading. If manure is not obtainable, use some good fertilizer, not too rich in Ammonia or Nitrogen. Apply this at the rate of one-half ton to the acre.

There is a good deal of difference in opinion as to the proper time to plant. Formerly everybody planted Dahlias as early as possible. Lately many authorities recommend planting as late as July 1st. It is often difficult, however, to keep the roots in good condition so late. Plant the roots four to six inches deep and two to four feet apart. Allow but one stalk to the root; cut the others off. If you wish, you can make new plants from these sprouts, as they root in soil very readily.

The soil around the roots of Dahlias should never be allowed to crust. Cultivate deeply until the buds begin to open. After this, one to two inches. By this method plants may be successfully carried through very dry summers.

The roots should be stored in cool cellars away from furnace heat.



Cactus Dahlia

QUEEN OF HEARTS—A beautiful white. Large flowers, free bloomer. Each, 25 cents.

MARGUERITE BOUCHON—Magnificent shade of brilliant, yet soft rose, with very large white centre, and distinctly defined white tips. Each, 35 cents.

PROFESSOR MANSFIELD—A remarkably large variegated dahlia. Flowers are of sparkling yellow, with clear white tips. A tinge of rosy-red is noticeable toward the centre. A free bloomer. Each, 25 cents.

ROSY MORN—Carmine rose. A very pretty flower and a free bloomer. Fine for cutting. Each, 25 cents.

COUNTESS OF LONSDALE—Salmon tinted apricot. The flowers are large and double of perfect form. A free bloomer. Each, 20 cents.

GENERAL BULLER—Rich velvety crimson, variegated; white tips. Very free bloomer. Each, 15 cents.

MAGPIE—Pink and maroon. Distinct and striking. Each, 25 cents.

STORMER—Deep scarlet. A very fine flower and an excellent bloomer. Fine for cutting.

SEQUOIA—Deep saffron-yellow, suffused with red. A free bloomer and will give entire satisfaction. Each, 25 cents.

MRS. WARNAAR—New. Delightful creamy white, overlaid with pink, giant size; a medal winner. Each, 50 cents.

KALIF—New. Pure scarlet, a majestic flower, of immense size and a prize winner. Each, 60 cents.

BIANCA—Large size and splendid form, rose lilac, with white shadings, on long, stiff stems. Each, 35 cents.

CRYSTAL—A splendid flower, silvery pink shading to white in the centre, large size and form. Each, 35 cents.

CANDEUR—Beautiful white, very rich; an extra good one. Each, 35 cents.

GOLDEN GATE—Flowers often 8 inches across, bright golden yellow; a first class Dahlia in every respect. Each, 25 cents.

LIBELLA—A beautiful purple one that you will appreciate. Each, 20 cents.

J. H. JACKSON—An old favorite; dark red with white tip. The darkest one known. Each, 20 cents.

FLAME—Flaming red; cheery and effective. Each, 20 cts.

BREAK O' DAY—A large flower with full, high centre, petals curved and twisted, intermingling with each other. Color, a clear sulphur yellow, shading to white at tips. Very early and free flowering. Each, \$1.00.

Pæony Flowered Dahlias

M. McLAREN—This dahlia is a leader in the pæony-typed variety. It is a clear pink suffused with a beautiful salmon color. Flowers are large and it is a free bloomer. Each, 40 cts.

GEISHA—Showy and attractive, unique in form and color; rich colored flowers are original in form, consisting of peculiarly twisted and curled petals of an effective rich combination of scarlet and gold. Each, 50 cents.

HAMPTON COURT—Hydrangea pink. A large handsome flower. Each, 25 cents.

JANS OLIESLAGERS—Deep primrose yellow, rich and very effective; flowers large and full. New. Each, 30 cents.

BEETHOVEN—Lovely shade of amber; very free; one of the best for gardens. Each, 30 cents.

KING ALBERT—Handsome, large, royal purple; one of the finest. Each, 50 cents.

F. R. AUSTIN—Shades and tints running from carmine, pink and yellow to cream. One of the best. Each, 30 cents.

ATTRACTION—Lilac rose; large; habit perfect; long stems. Each, 75 cents.

Collarette Dahlias

MAURICE REVOIR—Ox-blood red with deeper shading, in the centre of petals and a pure white fringed collar. Each, 15 cents.

Duplex Dahlias

CANARY—A clear yellow. Flowers measure 7 to 8 inches across. Very vigorous. Each, 25 cents.

KOERNERS WHITE—New; one of the very best of its class. Each, 35 cents.

Fancy Dahlias

PENELOPE—Small ball, white flaked, rosy lake, always in bloom. Each, 25 cents.



Type of Show Dahlia

Show Dahlias

EMILY—Delicate lavender, over-spread with white. The daintily blended colors make this an exceptionally beautiful dahlia. Long, stiff stems. Each, 15 cents.

RICHMOND—Rich glowing crimson, a very fine flower. Each, 20 cents.

LIVONIA—Yellow, Purple and Pink. Three separate colors. Resembles the show dahlias. When ordering, state color wanted. For beauty add one of these to your collection. Each, 15 cents.

ARABELLA—Light sulphur yellow, shaded peach blossoms on edges, a fine flower. Each, 15 cents.

DREER'S WHITE—In color a pure white. Has been much admired at the exhibitions where shown, and has in most cases been awarded the premier prize as the finest snow white show variety. Very free. Each, 25 cents.

WHITE SWAN—A reliable pure white. Each, 20 cents.

CUBAN GIANT—Very large ball-shaped flowers of a bright maroon; free and early. Each, 25 cents.

YELLOW DUKE—Large flowers and plenty of them, very attractive. Each, 25 cents.

Century Dahlias

ROSE PINK—Flowers 6 inches and over in diameter, clear rose-pink color, a strong grower with long, stiff stems, for cutting. Free bloomer. Each, 25 cents.

Decorative Dahlias

HORTULANUS FIET—A colossal flower of the most delicate shade of shrimp-pink. The entire flower has a suffusion of delicate tints of red and gold, which give it a glow of great charm. Each, 50 cents.

JACK ROSE—Brilliant crimson-red, similar in shade to the popular "Jack Rose," which suggested its name; perfect for garden decoration or for cutting. Each, 25 cents.

RED HUSSAR—A beautiful shade of red. A pleasing flower for garden and cutting. Very vigorous. Each, 15 cents.

SOUVENIR DE GUSTAVE DOAZON—One of the largest decorative dahlias, measuring often 8 inches in diameter. Color is of a beautiful red. The flowers are of most perfect form. Each, 25 cents.



Decorative Dahlia

QUEEN MARY—Rose pink. An ideal flower for cutting. Holds up well and is a free bloomer. Each, 30 cents.

HARMONY—Pale rose. A very pretty flower and an excellent bloomer. Each, 25 cents.

DELICE—Beautiful, soft rose-pink, with long, stiff stems. Each, 25 cents.

EVENTIDE—White, edged with a faint flush of delicate rose. A splendid flower of perfect form and large size. Each, 25 cents.

MINNIE McCULLOUGH—One of the most popular art-flower varieties now grown; particularly valuable for use under artificial light. Color, soft yellow, overlaid with bronze; a beautiful autumnal tint. Each, 15 cents.

DUKE or C. H. BRECK—Cream-colored centre, shading to soft red. Ends of petals dark red. Flowers large. We highly recommend this flower for the garden. Has long stems and is a free bloomer. Each, 25 cents.

FLAMINGO—Color, beautiful pink; overlaid Tyrian rose; open centre, very free, early bloomer. Each, 25 cents.

MINA BURGLE—This is one of the finest dark red dahlias yet introduced. Flowers often measure 8 inches across. A perfect beauty. Each, 25 cents.

SYLVIA—Soft, pleasing mauve-pink, gradually turning to white in the centre. A fine cut flower. Each, 25 cents.

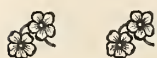
W. F. GUDE—A pure white flower of large size. Long stems which makes it a fine flower for cutting. Each, 25 cents.

KING OF AUTUMN—An introduction by Mr. Hornsveld, the eminent Dutch dahlia hybridizer. Buff yellow, suffused terra cotta, a splendid decorative variety and a winner at every show. We have very strong roots. Each, 35 cents.

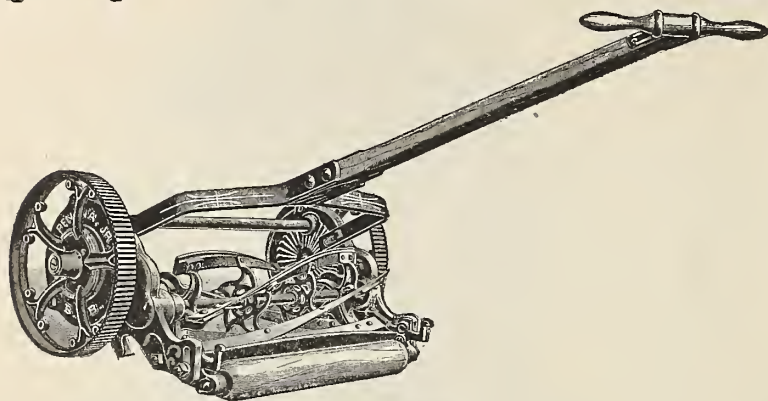
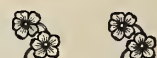
MESSENGER—New; large blooms, good stems, no end of flowers both early and late. Each, 25 cents.

COPPER—The largest and one of the very best. Often ten inches across. A beautiful copper color shading to bronze and apricot. Has long stems and is a free bloomer. Each, 75 cents.

OFFENBACH—Clear yellow, graceful flowers, petals slightly twisted, remarkable bloomer on strong stems. Each, 35 cents.



LAWN REQUISITES



PENNSYLVANIA QUALITY LAWN MOWERS

PENNSYLVANIA QUALITY Lawn Mowers cost a great deal more to make and a little more to buy, but the service they give ultimately makes them cheaper—they last so long the cost is forgotten.

Some of the features which make the PENNSYLVANIA stand out among all others are the open cylinder and the open wheel, and the self-sharpening device, the PENNSYLVANIA being the first machine to make a successful ball-bearing mower.

The advantages of a train of gears over internal gears, makes the former run more easily and steadily by reason of their great length of wheel base.

There is the additional advantage of better distribution of wear and tear and increased power and spread.

Pennsylvania, Jr.

The PENNSYLVANIA, Jr. has all the good points of the Standard Pennsylvania, with the addition of some features that make it the most perfect grass cutter in the world. Its self-sharpening features alone will make it worth its cost to the user, as it will save this expense until the blades are worn out—in average use a dozen years or more.

10-inch Wheels. 6-inch Five-Blade Cylinder			
15-inch.....	\$30.00	19-inch.....	\$38.00
17-inch.....	34.00	21-inch.....	42.00
8-inch Wheels. 5½-inch Five-Blade Cylinder			
12-inch.....	\$18.00	16-inch.....	\$24.00
14-inch.....	21.00	18-inch.....	27.00

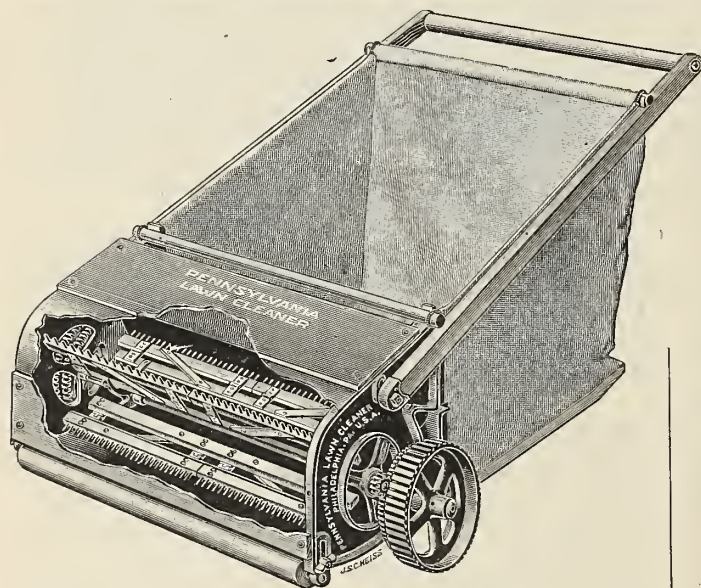
The GREAT AMERICAN ball bearing is the best all-around mower of its type in the world. The perfect-fitting ball cups and cones insure an easy-running machine. Double geared, which gives fine results.

10-inch Wheels. 6-inch Five-Blade Cylinder	
15-inch.....	\$20.50
17-inch.....	23.50
19-inch.....	25.00
21-inch.....	27.00

The STANDARD PENNSYLVANIA is the pioneer of all lawn mowers, having an open cylinder, open wheels and a train of gears.

High Wheel, 10½ inches in diameter.

15-inch.....	\$27.00
17-inch.....	30.00
19-inch.....	34.00
21-inch.....	37.50



PENNSYLVANIA LAWN CLEANER

This machine will remove from the lawn not only the cut grass, but all sorts of litter, leaves and trash, leaving the grass standing upright and free from foreign matter that prevents the sunlight and dew from getting to the roots.

The metal teeth rake up everything on the surface of the lawn, and in combination with the current of air carry it to the canvas receptacle or basket, which is large and easily emptied when full.

The suction created by the three rapidly revolving rakes cleans the lawn on the same principle as the vacuum cleans the carpet. One man will do more and better work than four men with rakes.

24-inch.....	\$30.00	36-inch.....	\$43.00
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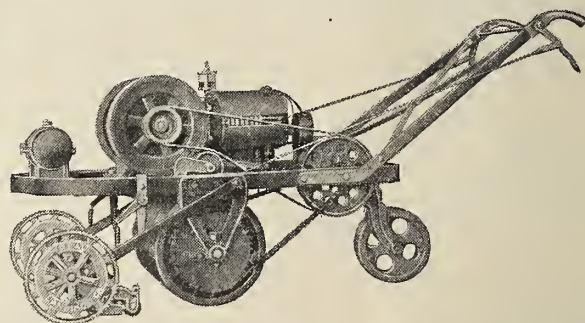
PENNSYLVANIA LAWN TRIMMER (Ball Bearing)

Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting the grass left at the edge of lawns after mowing.

Will cut to within three-eighths of an inch of wall or tree trunk, and mow any border wide enough to run one wheel on.

Undercut Style.....	\$13.00
Straight-cut Style.....	11.50

IDEAL MOTOR MOWER



A sturdy, compact, fool-proof mower which runs on gasoline power and requires only the guidance and attention of an ordinary workman.

Whether used on small lots, on extensive country estates, or public grounds, the Ideal can always be relied upon for a clean, speedy job.

As shown above it is a combined power mower and roller. This machine will mow from four to five acres of grass per day at an operating expense of about fifty cents for fuel and oil.

Price—22-inch cut.....	\$265.00
“ —30- “ “.....	380.00
Riding attachment extra.....	35.00

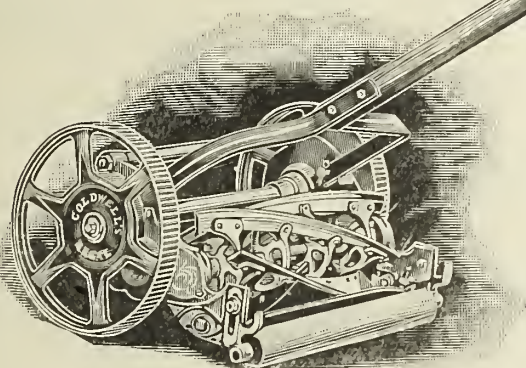
F. O. B. Philadelphia

PRICES IN THIS CATALOGUE ARE SUBJECT TO CHANGE WITHOUT NOTICE

COLDWELL'S BALL-BEARING LAWN MOWER

is particularly adapted for large lawns. It has large diameter drive wheels (10¼ inches) which together with the "rear drive" principle upon which it is built makes it particularly adapted where long, tough grass is encountered. The revolving cutter is 6 inches in diameter and is furnished with 4 blades. The revolving cutter bearings are equipped with Coldwell's patent self-adjusting ball bearings, which assures them staying adjusted a long time without requiring any attention from the operator. All the material used in the construction of this machine is of the best and nothing in this respect or in workmanship has been slighted. It is finished in white with red and gold trimmings, equipped with our patent terrace mowing arrangement, and can be supplied with grass catchers when desired.

14-inch cut.....	\$20.90
16-inch cut.....	22.20
18-inch cut.....	24.75
20-inch cut.....	27.00



THE COLDWELL BALL-BEARING OR PARK MOWER

COLDWELL'S DUCHESS MOWER

is a specially good mower. It is made on thoroughly practical lines and is so constructed that it cannot easily be disarranged. The drive wheels are 9 inches in diameter with the gears raised up from the ground, fully protected from the dirt and cut grass. The revolving cutter is 6 inches in diameter and has four crucible steel blades highly tempered and ground true their entire length. It is carried on our patented adjustable ball bearings. The simplicity and convenience of the adjustment of these bearings is appreciated by every one familiar with them. The ratchet has a flat steel sliding pawl, placed in the revolving cutter gear.

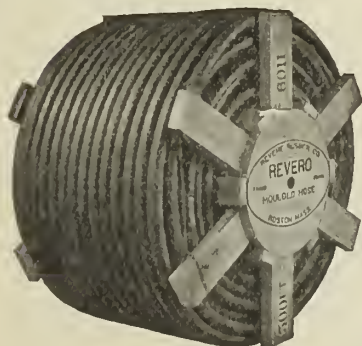
14-inch cut, \$12.95; 16-inch cut, \$13.30; 18-inch cut, \$13.95

COLDWELL'S "IMPERIAL" MOWER

is of exceptionally good value; it has four blades in the revolving cutter. In offering it to the trade we have no hesitancy in saying that it is the best moderate-priced mower on the market. The drive wheels are 8 inches in diameter and have a wide tread which gives it good traction and prevents the mower from sinking in soft ground. The gears are fine cut and fully protected from the cut grass and dirt. The revolving cutter is 6 inches in diameter and is carried on ball bearings of the same size, material and design as is used on our more expensive grades of mowers. The bottom or stationary knife is a highly tempered steel blade, heavier than those used on other makes of mowers of this grade. The ratchet has a flat steel pawl placed in the revolving cutter gear and acting with it. It is strong and reliable. It is far superior to any other of its class in material, workmanship and design. It cannot fail to give satisfaction.

Made in 14, 16 and 18 inch sizes. Low Wheels.

14-inch cut, \$18.60; 16-inch cut, \$20.95; 18-inch cut, \$21.50

RUBBER HOSE

	PER FOOT
MINGLE'S Seamless or Molded, ¾-inch.....	\$0.20
Special Lehigh, 6-ply, ¾-inch.....	.16
Special Lehigh, 5-ply, ¾-inch.....	.14
Revero Spray Pump Hose.....	.15
25-foot lengths and upward, coupled free, smaller sections couplings.....	per pair .20
Brass Hose Menders.....	each .05
Brass Couplings.....	per pair .35
Hose Band, Caldwell.....	dozen .25
Gem Graduating Nozzles.....	.50
Hydrant Attachments.....	.50
Whiz Lawn Mower Oil.....	cans .10

BUCH'S WATER BALLAST ROLLER

A vast improvement over the other makes of rollers. Particular features: Round edge drums; no tearing up of sod; handle always off the ground. Ball bearing, easy running; can be filled with sand or water.

NO.	LENGTH	WEIGHT WITH SAND	WEIGHT WITH WATER	PRICE
601	20 inches	350 lbs.	260 lbs.	\$19.00
602	24 inches	475 lbs.	330 lbs.	24.00

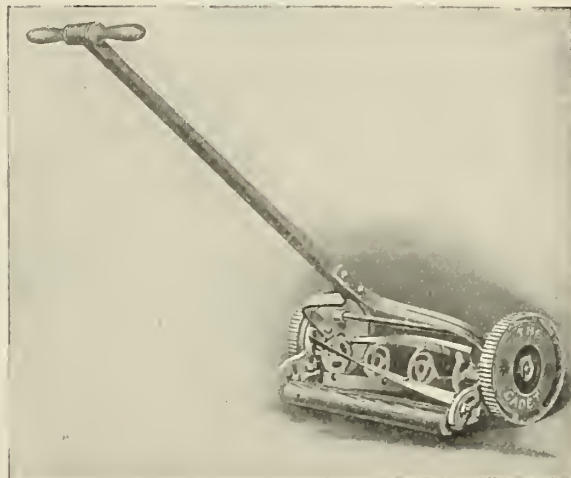
THE CADET

This is a good lawn mower at a medium low price, and gives the purchaser full value for his money. It has brass bushings and the same ratchets and adjustments that are used on many of the high-grade mowers. The gears are fine cut, and it is in every respect what is needed at the present time, viz., a mower that will do good service and at a cost but little higher than the poor trash that is put out so freely.

Diameter of Drive Wheels: 8 inches

Number of Blades: Three

12-inch cut.....	\$8.60
14-inch cut.....	8.85
16-inch cut.....	9.25



THE CADET



"MAYTREE"

VULCANIZED, MOISTURE-PROOF, NON-BREAKABLE FLOWER POT SAUCERS



are guaranteed to always remain absolutely moisture-proof.

NON-BREAKABLE

MAYTREE flower-pot saucers are superior in every way to all other kinds of flower-pot saucers—are practically non-destructible and should last forever.

HAVE A SOFT FINISH

that will not wear off and will not mar or scratch the finest surface.

NOT AFFECTED BY PLANT WATER ARE LARGE AND DEEP

Larger sizes are ideal for bulb saucers.

Retail Price List.

Size.	Each.	Doz.
4 inch	\$0.12	\$1.30
5 inch	.14	1.50
6 inch	.16	1.70
7 inch	.19	2.05
8 inch	.23	2.45
9 inch	.27	2.90
10 inch	.46	4.95
11 inch	.52	5.60
12 inch	.58	6.25

SQUARE PLANT STAKES

These are painted green and nicely tapered and finished.

	Each	Doz.	100
1½ ft.	\$0.04	\$0.35	\$2.25
2 ft.	.05	.55	3.75
2½ ft.	.07	.75	5.50
3 ft.	.10	1.00	7.50
3½ ft.	.12	1.25	9.00
4 ft.	.15	1.40	12.00
5 ft.	.20	2.25	18.00
6 ft.	.25	2.75	20.00

POT LABELS

Plain, pointed wood for flowers and all plants.

	100	1000
4 inches	\$0.30	\$2.00
4½ "	.35	2.25
5 "	.40	2.45
6 "	.50	3.00

Garden Size

	100	1000
8 inches	\$1.40	\$8.50
10 "	1.90	11.50

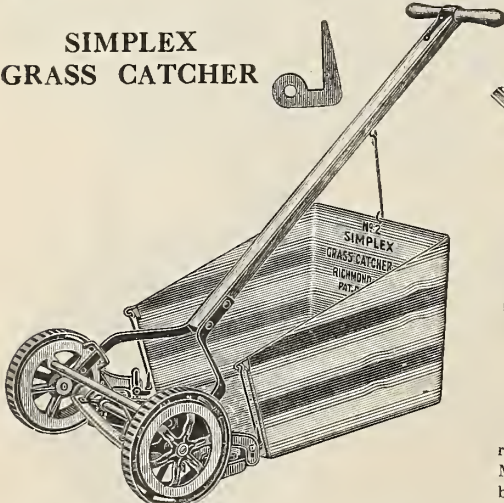
NEPONSET



For transplanting and shipping potted plants, and for starting many kinds of hotbed plants.

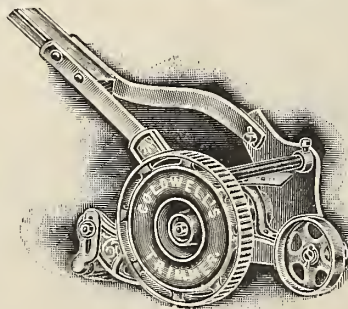
	Doz.	100	1000
2¼ in. Pots	\$0.15	\$0.85	\$5.65
2½ in. Pots	.20	.95	6.25
3 in. Pots	.25	1.10	8.25
3½ in. Pots	.30	1.50	11.00
4 in. Pots	.35	1.75	13.75
5 in. Pots	.50	3.00	21.50
6 in. Pots	.65	3.75	28.00

SIMPLEX GRASS CATCHER



No. 1—12 to 16 in. mower, inclusive.....\$2.25
No. 2—16 to 20 in. mower, inclusive..... 2.50

COLDWELL'S LAWN TRIMMER



This machine meets the demand for a real first-class lawn edge or border trimmer. Made of best material throughout, ball bearings, single screw adjustment, bottom knife of finest tool steel; cuts a swath of 8 in. Price \$18.00.



Tree Tanglefoot is a sticky compound similar to that used in making Tanglefoot Fly Paper and is especially adapted for protecting trees from the attack of climbing and creeping insects, particularly gypsy, brown-tail and tussock caterpillars, canker worms, climbing cut worms and ants. On matured fruit trees and all shade trees it is applied directly to trunks, but on young fruit trees we recommend application over strips of manila paper.

One pound makes 9 to 10 lineal feet of band. One application remains sticky three months and longer or 10 to 20 times as long as any other known substance. On account of this great superiority it has practically displaced all other banding compounds in the United States and in many foreign countries. Tree Tanglefoot works alike in rain, sun, winds, etc. Does not soften, run or melt, yet is always elastic, expanding with growth of tree. No mixing required; simply open can and use. Applied with wooden paddle. Will not injure trees.

For tree surgery, Tree Tanglefoot is superior to anything on the market. It is the best application after pruning or trimming—it will waterproof the crotch of a tree, or a wound or cavity in a tree when nothing else will do it. For this purpose one application lasts several years, all the time wholly impervious to air and water.

Guaranteed to keep perfectly many years in original packages. Price, 1 lb., 50c.

BENT NECK RUBBER SPRAYER



For spraying small plants; an ideal one for house use. Price—6 oz., 75c.; 10 oz., \$1.00.

PLANT TUBS



Mingle's Everlasting.
Made of White Cedar,
painted Green, electric
welded heavy wire
hoop without handles.
We sell handles, sep-
arate, 10c. pair.

No.	Inside Top Diam.	Inside Bottom Diam.	Inside Depth	Each
1	6 in.	5 in.	6 in.	\$0.65
2	7 in.	5 in.	7 in.	.75
3	8 in.	6 in.	8 in.	.80
4	9 in.	7 in.	9 in.	.90
5	10 in.	7½ in.	9 in.	1.05
6	11 in.	8½ in.	10 in.	1.25
7	12 in.	9 in.	11 in.	1.50
8	13 in.	10 in.	12 in.	1.90
9	14 in.	11 in.	13 in.	2.20
10	15 in.	11½ in.	14 in.	2.40

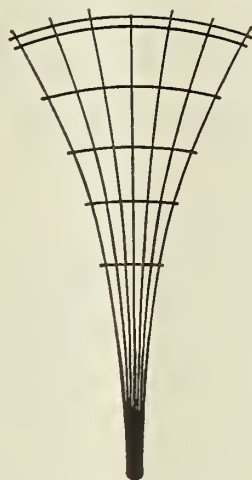
CEDAR TREE TUBS

New York Pattern.

Made of
choicest sea-
soned White
Cedar. Highly
finished, iron
hoops, iron feet,
drop handles.



No.	Inside Top Diam.	Inside Bottom Diam.	Inside Depth	Each
1	12 in.	9¾ in.	10¾ in.	\$2.75
2	13 in.	10¾ in.	12¾ in.	3.50
3	14½ in.	12 in.	14¾ in.	4.50
3½	16½ in.	14½ in.	14¾ in.	5.50
4	19½ in.	17¼ in.	16¾ in.	6.25



FAN TRELLIS

A very popular style for Roses made of
wood, painted green.

	Each
18 in.	\$0.45
24 in.	.50
30 in.	.95
3 ft.	1.35
3½ ft.	1.50
4 ft.	2.00
5 ft.	2.50
6 ft.	3.00

EARTHENWARE SAUCERS



These cannot be sent by Parcel Post.

Size	Each	Doz.	100
4 inches.	\$0.04	\$0.36	\$2.40
5 "	.05	.48	3.20
6 "	.08	.72	4.80
7 "	.10	.96	6.40
8 "	.14	1.32	8.80
9 "	.19	1.80	12.00
10 "	.22	2.16	14.40
11 "	.28	2.64	17.60
12 "	.34	3.24	21.60
14 "	.56	5.40	36.00

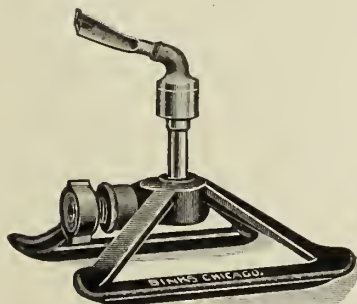
WIRTS' HOSE REEL

All tubular—capacity.

No. 2—7 in. wheel, 100 ft.	\$2.70
No. 20—24 in. wheel, 150 ft.	3.50
No. 10—21 in. wheel, 100 ft.	4.00

LAWN SPRINKLERS

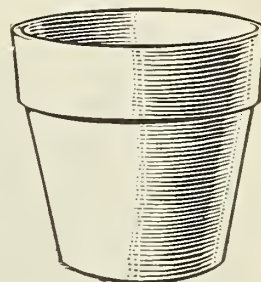
RAINFALL	\$2.00
BUSY	.60
PENINSULAR	2.25
MAYFLOWER	1.75
HALF CIRCLE	.75
LARGE BRASS RING	.95
SMALL BRASS CIRCLE	.70



Rainfall.

EARTHEN
FLOWER
POTS

These can-
not be sent
by Parcel
Post.



Size	Each	Doz.	100	1000
1 inch	\$0.03	\$0.22	\$1.44	\$13.50
2 "	.02	.18	1.20	11.25
2½ "	.03	.21	1.36	12.75
2½ "	.03	.24	1.60	15.00
3 "	.04	.32	2.56	19.50
3½ "	.04	.39	2.56	24.00
4 "	.05	.48	3.20	30.00
4½ "	.07	.65	4.32	40.50
5 "	.09	.87	5.76	54.00
5½ "	.12	1.08	7.20	67.50
6 "	.14	1.30	8.64	81.00
6½ "	.18	1.73	11.52	108.00
7 "	.23	2.16	14.40	
8 "	.33	3.12	20.80	
9 "	.50	4.80	32.00	
10 "	.68	6.48	43.20	
11 "	1.00	9.60	64.00	
12 "	1.38	13.20	88.00	
14 "	2.25	21.60	144.00	

EARTHEN
BULB
POTS

These can-
not be sent
by Parcel
Post.



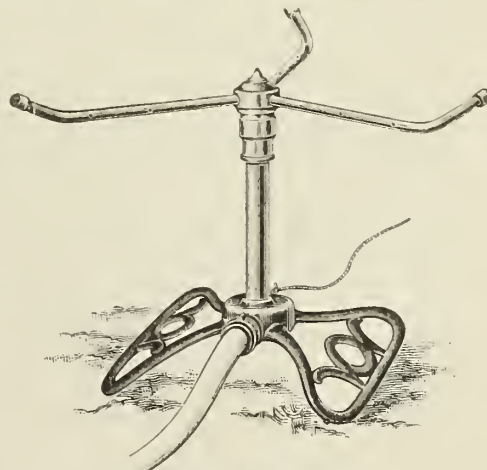
These are fine for planting with bulbs,
for ferns and other compact plants.

Size	Each	Doz.	100
6 inches diam.	\$0.14	\$1.30	\$8.64
7 "	.23	2.16	14.40
8 "	.33	3.12	20.80
9 "	.50	4.80	32.00
10 "	.68	6.48	43.20
11 "	.75	8.00	64.00
12 "	1.38	13.20	88.00
14 "	2.25	21.60	144.00

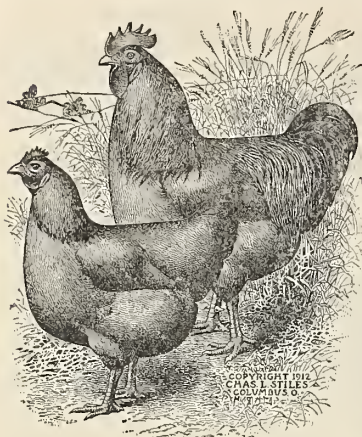
SPRINKLING POTS

Heavy Galvanized Iron.

4 qt. size	\$0.75
6 qt. size	.90
8 qt. size	1.15
12 qt. size	1.50
16 qt. size	1.90



Peninsular.



POULTRY AND PIGEON FEEDS

"OUR RULE --- Absolute freedom from all dirt and foreign matter"

Coarse Cut Alfalfa—An excellent and invigorating green food for fowls, very easily digested, and calculated to keep them in fine condition. Our preparation is specially re-cleaned from all foreign matter before being cut to edible size. 10 lbs., 45c.; sack (100 lbs.), \$3.00.

Alfalfa Meal—For feeding dry or mixing in mash; excellent for the little chicks. 10 lbs., 50c.; 100 lbs., \$3.00.

Barley—The great muscle and bone builder. Our grade of this grain is no exception to our rule—"absolute freedom from all dirt and foreign matter." 5 lbs., 30c.; 10 lbs., 50c.; bus. (48 lbs.), \$2.50.

Bone (Granulated Poultry Size)—Contains the necessary Phosphoric Acid and Lime so essential to laying hens. It has all the nutritive ingredients essential to good egg production. 5 lbs., 35c.; 10 lbs., 60c.; 25 lbs., \$1.35; 100 lbs., \$5.00.

Buckwheat—Very useful, and giving poultry a variety in the way of feed. 5 lbs., 25c.; 10 lbs., 40c.

Chick Feed (Pratt's Baby Chick)—A perfect food for young chicks, ducks and turkeys. So ground and bolted that it is mechanically pre-digested. Furnishes the same nutriment, in the same proportion, as the mother hen. Pkg. (3 lbs.), 30c.; pkg. (6½ lbs.), 60c.; 14 lbs., \$1.35; 100 lbs., \$7.50.

Chick Feed (Red Comb)—Too much attention cannot be given the quality and preparation of the ingredients of which chick feed is made, for, if impure grain is used, the mass soon tends to become mouldy, and the chicks will suffer. We offer only the best. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.10; 100 lbs., \$4.00.

Chick (Developing Red Comb)—Prepared especially for properly matured young chicks, after they are ready to have the chick food, and so carry them along to the age when they are ready to feed on the whole grain. Chicks should be given Developing food when from 8 to 10 weeks old. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.10; 100 lbs., \$4.00.

Chick Manna (F. P. C.)—A very desirable preparation for young chicks under 10 days old. Promotes health, quick growth and strong development. Especially valuable for raising chicks in winter and early spring. 1 lb. pkgs., 20c.; 3 lb. pkgs., 35c.

Corn (Cracked)—Our Cracked Corn is made from sound, well matured and well cured grain. It is fresh and sweet. 10 lbs., 50c.

Corn (Whole Small Flint)—Our flint corn is the best obtainable. It is clean, sweet and free from foreign matter. 5 lbs., 25c.; 10 lbs., 45c.; 100 lbs., \$3.75.

Charcoal (Granulated)—Excellent for young and old chicks; should be kept constantly in reach of all chicks. Prevents sour crop. It is of uniform grade, carefully screened and free from dust. It aids digestion and promotes the health of fowls in every way. Fine, medium, coarse. Pkgs., 15c.; sacks (50 lbs.), \$2.00.

Flax Seed (Or Linseed Meal)—Tends to produce a fine, glossy plumage. Should be fed occasionally in small quantities, with other soft feed. 5 lbs., 40c.; 10 lbs., 75c.; sacks (100 lbs.), \$6.00.

Grit (Mica Crystal)—To aid digestion it is necessary to feed some gritty material. Mica Crystal supplies this want better than any other article known. We supply this in three grades, fine, for small chicks and birds; medium and coarse, for larger fowl. Fine, medium, coarse, 5 lbs., 15c.; sacks (100 lbs.), \$1.50.

Gluten Meal—For feeding poultry and stock; is an excellent addition to all mash feeds and a good fattening agent. 5 lbs., 10 lbs., ; larger lots on application.

Hemp—A healthful feed, noted for its fattening properties. 1 qt., 18c.; 2 qts., 35c.; 4 qts., 65c.; 5 lbs., 60c.

Kaffir Corn—Our Kaffir Corn is the white, and the best procurable for feeding purposes. We offer only fresh, re-cleaned seed, absolutely free from dust or other foreign matter. 10 lbs., 45c.; 25 lbs., \$1.10; 100 lbs., \$3.80.

Meat Mash (Red Comb)—A feed for chick development. Also an egg-producing feed. Hens fed upon it are laying when others are laying off. Poultry raisers everywhere, some of wide reputation, have enthusiastically given credit to it for phenomenal winnings in egg competitions and in the show rooms. And results are of greatest importance to the average poultryman. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.10; 100 lbs., \$4.00.



"XX" Red Cross Pigeon Health Grit is superior to the other Red Cross brands by reason of its having more concentrated Pure Bone Ash, and tonic properties, and costs more than any other Health Grit to prepare. The analysis of the droppings from the birds fed on the "XX" shows 62 per cent. less waste of protein than that from birds not fed with it, proving conclusively the great waste of food that goes in the droppings that should be used, adding flesh more quickly, giving more vigor and strength to the birds, and a great saving on feed. The price may seem high in proportion

to that of ordinary Grits, but as the manufacturers make it in immense quantities, the price has been reduced to a minimum at per sack of 100 lbs. Sack (100 lbs.), 90c.

Meat Scraps (Or Poultry Meat)—Manufactured for us by a reliable firm. Nothing but pure materials are used, and no deleterious preservatives. Our stock is strictly fresh at all times. It is a great egg producer. 5 lbs., 40c.; 10 lbs., 70c.; sack (100 lbs.), \$5.50.

Millet (Bird)—Best imported seed. Large size, bright colored grain. Scattered in fine litter it "provides" more exercise than any other grain food, making the "wee wee babies" get right down to hard work to get their "daily bread." 1 qt., 25c.; 4 qts., 75c.; (50 lbs.), \$3.00.

Mustard (For Poultry)—A good tonic; heats the blood; a stimulant mostly fed in the cold weather in mash feeds. 1½ lb. pkgs., 3 lbs., 5 lbs., .

Oats—Our stock of this food is extra heavy; fine for sprouting. 4 qts., 50c.; 8 qts., 90c.

Oyster Shell (Prepared)—Manufactured from shells in a pure condition. The lime contained in the shells assists in the formation of the egg shell and contributes to the general health of the fowls. Fine, medium, coarse, 5 lbs., 15c.; 20 lbs., 20c.; fine, medium, coarse, sack (100 lbs.), \$1.50.

Canada Peas—Most preferable for feeding pigeons, being perfectly round and very small. We are offering especially fine grade.

Pigeon Feed—To meet the requirements of the discriminating pigeon fancier, who may raise birds either on a large or on a small scale, we have prepared, and find ready sale for, the mixtures that will here follow:

No. 1—A mixture of grains most suitable for homers and all fancy birds.

If you want your birds to fly fast, feed No. 1. It is a speed maker; does not contain any corn. 5 lbs., 40c.; 10 lbs., 65c.; 25 lbs., \$1.60; 100 lbs., \$5.40.

"Special"—Is one specially mixed for those who want a feed with corn in the mixture; it is very similar in other respects to No. 1. Fancy birds greatly relish this food. 5 lbs., 40c.; 10 lbs., 65c.; 25 lbs., \$1.60; 100 lbs., \$5.40.

"Squab Maker"—This mixture contains the same grains as "Special," but in varied proportions. This mixture is quite popular with large pigeon ranchers. 10 lbs., 65c.; 50 lbs., \$3.20; 100 lbs., \$5.40.

Scratch Feed (Red Comb)—We are the local agents for the largest Western house manufacturing this kind of feed. It is a popular sort and has an immense sale, because of its excellent feeding qualities. 5 lbs., 25c.; 10 lbs., 45c.; sack (25 lbs.), \$1.00; 100 lbs., \$3.50.

Rice (Broken)—Used with other feed, lightens digestion; improves the birds. 5 lbs., .

Rape (Dwarf Essex)—Why not plant some of this seed early in the spring. It makes quick growth and is one of the best forage plants known for poultry. Price per lb., 20c.; 5 lbs., 90c.; 10 lbs., \$1.75.

Salt Cat (For Pigeons)—A mixture of aromatic herbs and tonic remedies. Sold in compressed brick form. 10c. per brick; 3 for 25c.

Sunflower (Large and Small)—For chickens. Clean seed and well filled grades. 1 qt., 18c.; 2 qts., 35c.; 4 qts., 65c.; 5 lbs., 75c.; bus. (25 lbs.), .

Tobacco Stems—For making nests for pigeons or poultry. 5 lbs., 25c.; bbl. sack, \$1.25; bale, \$2.50.

Vetches (For Pigeons)—A most excellent food for pigeons. 10 lbs., \$1.00; 100 lbs., \$8.50.

Wheat (Feeding)—The quality of our feeding wheat will be found all that can be desired. 5 lbs., 35c.; 10 lbs., 60c.

Our many customers express great satisfaction with the quick service and quality of goods sold them. Deal with us and get a square deal.

BIRD AND DOG FOOD

CANARY (Plain)—The canary seed we import is large, Spanish, heavy, and free from dust or other impurities. Canary raisers appreciate the fact that it does not pay to feed dusty and fermented seeds. 1 qt., 30c.; 10 lbs., 90c.

CANARY (Mixed)—A mixture of canary and bird rape, very beneficial to cage birds, to which may be added any of the seeds enumerated below, at the option of the customer. 1 qt., 35c.; 10 lbs., 90c.

BIRD RAPE—Some canaries prefer a large proportion of Rape Seed, others less. We supply it separately at the prices following: 1 qt., 35c.; 10 lbs., \$1.40.

BIRD LETTUCE—A slight sprinkle of this is much relished by canaries and should be given only occasionally, as lettuce contains a slight trace of opium, which is, however, not harmful. 1 oz., 5c.; ¼ lb., 10c.; 1 lb., 25c.

BIRD MILLET—This is especially well adapted for mixture with canary and rape for feeding canaries, as it gives variety. 1 qt., 20c.; 4 qts., 75c.; peck, \$1.00; bushel, (50 lbs.), \$3.00.

CUTTLE BONE—The bone of the cuttle fish, an indispensable adjunct to the canary bird. each; 10c.

HEMP—Hemp seed has a tendency to fatten the birds, and should therefore be fed only in small quantities occasionally. 1 qt., 20c.; 4 qts., 65c.; bushel, \$3.20.

HULLED OATS—5 lbs., 50c.; 10 lbs., 90c.; 25 lbs., \$2.00.

MAW SEED—Calculated to improve the song of canaries, etc. Also used as a condiment. Per lb.,



SPRATT'S PATENT MEAT FLBRINE VEGETABLE DOG BISCUITS—The standard dog food. Used at the leading kennels and dog shows throughout the world. A staple and constant food for all breeds of dogs. 100 lbs., \$11.00; 25 lbs., \$2.90; 3 lbs., 40c.; per lb., 15c.

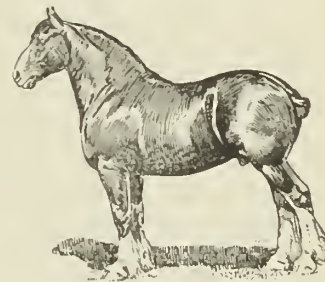
SPRATT'S PATENT PUPPY BISCUITS—The standard puppy food. A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about a month old, and then should be continued until such time as their teeth become sound and strong, usually when they are about six months old. 100 lbs., \$12.00; 25 lbs., \$3.25; 3 lbs., 40c.; per lb., 15c.

SUNFLOWER (Large, for Parrots)—Extra large, well-filled seed, very acceptable to discriminating parrots. 1 qt., 18c.; 4 qts., 60c.; 5 lbs., 70c.; 10 lbs., \$1.20.

SAND (Red and Silver)—Fine. 5c. pkg.; 50c. box.

PEBBLES—Qt., 5c.; peck, 30c.; bushel, \$1.00.

STOCK AND POULTRY REMEDIES AND NECESSITIES



KOW KURE, the Great Cow Medicine—We recommend KOW KURE for Scouring, Lost Appetite, Bunches or Red Water; especially for possible or threatened Abortion, for Barrenness, for Retained Afterbirth, for Milk Fever. Hundreds of users testify that it helps increase the flow of milk from 10 to 20 per cent. It is a remedy made only for cows. Costs a cent a day per cow. Postage extra, according to Parcel Post Regulations, which your Postmaster can give you. Small size, per can, 1½ lbs., 70c.; large size, per can, 3¼ lbs., \$1.40.

BAG BALM—We recommend Bag Balm for all diseases of udder and teats; Caked Bag, Sore Teats, Bunches, Chapping, Cuts, Inflammation, etc. It makes easy milkers of hard ones, keeps all the parts in a sanitary, healthful condition. Per box, 65c.

GRANGE GARGET CURE—We recommend GRANGE GARGET CURE for that peculiar disorder so peculiar to cows, the hardening of the udder or garget. Inexperienced people often mistake it for caked bag, bunches in bag, etc. Remember, it is a separate disease, with its own peculiarities, causes, etc. Twenty-three years' use by dairymen and farmers proves its economy and value. Per can, 70c.

GREEN MT. HOOF SOFTENER AND GROWER—We recommend GREEN MT. HOOF SOFTENER AND GROWER for Thrush, Pinched or Contracted Hoofs, Brittleness of the Hoof, and, in fact, for every disease that attacks the hoofs of horses. It not only cures, but its frequent use will keep the hoof in a healthy condition. Per box, 65c.

AMERICAN HORSE TONIC—We recommend AMERICAN HORSE TONIC as a general improver for Horses. Hundreds of users tell us that horses look better, feel better, act livelier, are full of snap and ginger when they are given it. Besides this, we recommend it as a Worm Expeller, for Lost Appetite, Rough Hair, Coughs, Inflammation of Lungs and Bowels, Stoppage of Water, Recent Founders, Distemper, etc. Small pkgs., 35c.; large pkgs., 70c.

HORSE COMFORT—We recommend HORSE COMFORT for all Flesh Wounds, Wire Cuts, Galls and Sores of long standing, for Blood Poison, Proud Flesh, Scratches, Mud Fever, for Snag Wounds, Sore Shoulders, Grease Heel, Malignant Ulcers, Fistula, Poll Evil, Corns in Horses, etc. We claim that Horse Comfort has won the right to the name—"The World's Greatest Healer." Small bottle, in pkg., 35c.

CARBOLA—Disinfecting germ-killing White Paint. Use it instead of whitewash. A white paint and a non-poisonous disinfectant combined in a powder form. Ready as soon as mixed with water. Applied with brush or spray pump. Kills lice, mites, fly eggs, etc., and is a preventive of contagious disease. Recommended for poultry houses, stables, cellars, bog pens, dairies, etc. Satisfaction guaranteed. Twenty-five ounces (trial size package), 35 cents. Ten-pound package, \$1.30.



FLY SPRAY (Crednold)—Is an Insecticide, Germicide. It is non-poisonous and may be used with safety and effectiveness on Cattle, Horses, Hogs, Dogs and other domestic animals.

It will protect cows from flies and mosquitoes and prevent the loss in yield of milk which always occurs during the fly season.

It will destroy their eggs.

It will not gum the hair or make it brittle.

It will not irritate the skin.

It can be used at milking time and will not taint the milk.

It will protect horses from flies if applied before a drive, or before turning out to pasture.

One-gallon can, \$1.50.

WHITE ROCK HOOF PACKING—A natural absorbent and antiseptic, possessing wonderful healing power; very penetrating, relieves all soreness in the hoof. Pkg., 25c.

LICE KILLER POWDER (Drs. Hess & Clark)—Non-poisonous and non-explosive. Being stronger, has greater disinfecting qualities than similar preparations. Quickly and thoroughly kills lice on ducks and chickens. Rids horses, cattle, hogs, dogs and cats of lice. Destroys ticks on sheep, insects and bugs infesting shrubbery, vines and plants. Drives out moths and bugs from furniture, closets, carpets and clothing. Pkgs., 30c. and 60c.

PANACEA (Hess & Clark)—This is not a stimulant, but a digestive tonic, which produces eggs in nature's way. PANACEA fed in winter will wonderfully increase the egg production. It is fed with other foods, and enables the system to appropriate egg-making material from the feed fed. Pkgs., 1¼ lbs., 30c.; 5 lbs., 75c.; 12 lbs., \$1.50.

PINE TAR—For stock of all kinds: used by dairymen and others as a healing agent in dehorning cattle; also cures distemper. Pt., 15c.; qt., 25c.

CONKEY'S ROUP REMEDY—An excellent remedy for cold, or Roup, diphtheria and all catarrhal diseases, as well as for Canker. It is a preparation having antiseptic emollient or healing properties, and is non-irritant. Is also used as a preventive. Pkg., 30c. and 60c.

MILKING TUBES—for sore and obstructed teats and hard-milking cows. This tube should be in the hands of every cow owner. These tubes are adjustable and can be made any length by moving the adjustable slide; can also be used for a probe to pass an obstruction. The tubes are made of coin silver. Per set of four Tubes, 1¾ inches, \$2.00; each, 50 cents.

Pratts ANIMAL AND POULTRY REGULATORS AND REMEDIES

Satisfaction Guaranteed or Money Refunded.



Healthy birds and lots of eggs, the two big things in poultry raising, are made certain by giving

Pratts POULTRY REGULATOR
100 lb. bags, \$10.00; 25 lb. bag, \$2.70; 12 lb. bag, \$1.35; packages, 30c. and 60c.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons.

Pratts is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas—insuring quick growth and keeping them free from disease.

Get rid of lice on your poultry, in nests, dust-baths, incubators and elsewhere in a day's time by using

Pratts Powdered LICE Killer

30c. and 60c.

Effective, non-poisonous, non-irritating. May be used wherever a powder is suitable. A splendid deodorizer.

It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. A valuable deodorizer and disinfectant for all poultry houses, barns, stables and dwellings. Drives out moths from closets, furniture, carpets and clothing.



Pratts Poultry Disinfectant and Liquid Lice Killer

If poultry owners would regularly spray the chicken houses, roosts, drooping boards and utensils with Pratts Poultry Disinfectant, most all their troubles would vanish. This great Disinfectant is a real wonder-worker in the poultry yard. Put up in 1 qt., 70c.; 2 qt., \$1.25; 1 gal., \$2.00.

To protect your chicks from white diarrhoea, the most destructive of all chick diseases, it is only necessary to give

Pratts White Diarrhoea Remedy

30c. and 60c.

in the drinking water from the first drink. This remedy has saved many dollars' worth of chicks for poultry raisers. You can depend on it.



More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits which come from using

Pratts ANIMAL Regulator

Always sold on a guarantee that it will satisfy you or money back.

25 lb. pails, \$4.10; are popular with our customers. Packages at 30c., 60c. and \$1.20. Get prices on 50 lb. and 100 lb. sacks.



Don't let ROUP cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is

Pratts ROUP Remedy

Tablets or Powder, 30c., 60c.

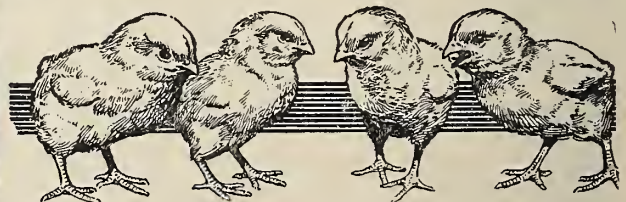
Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roups, colds, catarrh, and all bad weather diseases.

When baby chicks come, keep them healthy and growing and bring even the weak ones along by feeding

Pratts BABY Chick Food

14 lb. bag for \$1.35. Packages, 30c., 60c. 100 lb. bags, \$7.50.

A largely predigested baby food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents leg weakness, white diarrhoea, "pasting up" and other chick diseases.



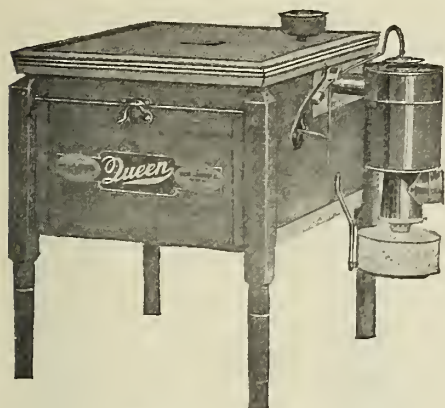
A Guaranteed Pratt Remedy for practically every Stock and Poultry Ailment,

PRATT FOOD COMPANY

Philadelphia

Chicago

Toronto



THE BABY QUEEN No. 20

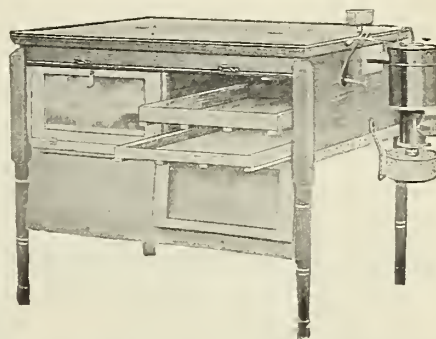
Most of the chicks you lose in the first few weeks die because they did not have, when hatched, enough strength or vitality for a good start. QUEEN Incubators are famous the country over for big hatches of strong, healthy chicks that live and grow.

QUEEN INCUBATORS

HATCH CHICKS THAT
LIVE AND GROW

Stop hatching weak chicks with cheap incubators. A QUEEN costs but little more, and the extra chicks that live and grow soon pay the difference.

Remember, it is not how many chicks you hatch that counts, but how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you but trouble and loss. They make one sick of the poultry business.



STYLE K INCUBATORS

NO.	CAPACITY	PRICE
20	70 eggs	\$21.50
21	130 eggs	33.75
22	220 eggs	43.50

QUEEN INCUBATORS

NO.	CAPACITY	PRICE
1	85 eggs	\$30.00
2	135 eggs	43.50
3	180 eggs	51.50
4	275 eggs	65.00
5	400 eggs	77.50
25	600 eggs	115.00

PEEP - O' - DAY HOVERS

The all-metal oil-burning hover. Can be placed almost anywhere without danger.

It is the most perfect Portable Hover ever offered to the public, regardless of price, covering all the following features satisfactorily: Adaptability—Even Temperature—Automatic Ventilation—Even Heat—No Kneeling Down to Care for Lamp—No Corners for Chicks to Crowd Into. Even Temperature—Fire-Proof—Sanitary—Durable—Radiant Heat and Low Priced. Its only rival is the mother hen. Send for circular.

No. 1—25 to 50 Chick Hover	\$3.90
No. 2—50 to 75 Chick Hover	5.90
No. 3—75 to 100 Chick Hover	7.90

THE FAMOUS MAGIC BROODER MADE IN TWO SIZES

Small size—capacity, 100 to 200
Chicks. Price..... \$26.00

Built by a man who has made good. This brooder is like a good mother; it never tires; it works while the little ones sleep, and not only broods but raises the chicks. Capacity 100 to 500 chicks. All cast iron. Write for catalogue; mailed free on application.

Large size—capacity 100 to 500 chicks—
Price, \$32.00.



THE EUREKA COLONY BROODER STOVE

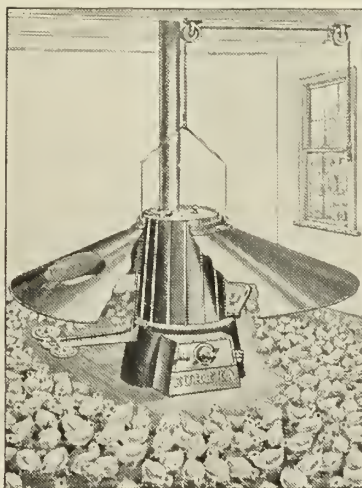
This Brooder Stove is one of the most economical ones on the market. Made in two sizes. Foreword: The capacity of Brooder Stoves can only be determined by amount of floor space given them, and not by size of stoves. For full description of this stove, call or write for descriptive catalog. Mailed free to all who apply.

No. 10 size—limit of floor space 8x8 feet.

Price, \$25.50

No. 20 size—limit of floor space 14x14 feet.

Price, \$31.50



FEEDING FOR EGGS

There is nothing complicated about getting eggs in winter. Pullets have got to be well matured and the hens finished in molt before they will produce eggs. A hen cannot grow feathers and make eggs at the same time, as each or both require too much protein. Good health, exercise and proper feeding, in addition to clean, comfortable quarters, are all that are necessary. Remember a fowl will stand considerable cold provided it is dry, but it will not stand a damp cold, nor damp quarters and keep in good health. With well ventilated quarters (there is no better way to keep a house dry than by good ventilation) that admit sunshine, feed the Red Comb Scratch in deep litter, for exercise, the Red Comb Mash Feed with Dried Buttermilk in a wall hopper, green food at noon, three times a week at least, and every day if possible; plenty of fresh water, some shell and grit and you are bound to get eggs. This is bound to be true if you have selected your layers and are not trying to get eggs from a lot of culls. You cannot get eggs from such culls any more than you can get sawdust from a stone.

SPECIAL PARTS FOR THE INTERNATIONAL SANITARY HOVERS.

Canvas Curtain, double	\$0.85
Curtain Rings	.35
Draft Pipe	.75
Felt Curtains	.75
Felt Lamp Wicks	.10
Hover Bodies	8.00
Lamp with Burner and Chimney	1.50
Lamp Burner	.40
Lamp Chimney	.35
Lamp Fount	.65
Lamp Frame	3.50
Mica Disk for Peep Hole	.10
Set Screw for Burner	.05
Thermometers	.65

INTERNATIONAL SANITARY HOVER

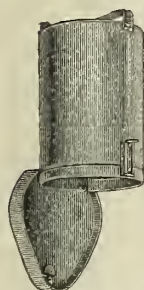
The International Sanitary Hovers have stood every climatic test from Panama to Quebec. Practical poultrymen, state experiment stations and poultry judges indorse them. You can raise chicks anywhere with International Sanitary Hovers. No specially constructed houses are necessary. There is no better place than in your regular hen houses.

Sanitary Hovers are as practical for the small back-yard poultry raiser as for the large poultry farms. They are fireproof and vermin-proof, warmest at the curtain, radiate heat downward on the backs of the chicks, and in this way prevent leg weakness—usable anywhere—ready for business, wherever placed. To set them up, you simply set them down. No crowding or smothering of chicks—no kneeling in mud to get at the lamp—no cutting of holes or building of platforms. You want the best brooding device—you will get it in the Sanitary Hovers. Price, \$18.00 each.

DRINKING FOUNTAINS AND FEEDERS

IMPROVED

DROP BOTTOM FOUNTAINS



SINGLE WALL. This fountain combines the good qualities of the three fountains—Economy, Flat Back and Drop Bottom. The pan, which forms the trough, is hinged at the back and fastened by a catch in the front. The flat back allows the fountain to be firmly placed against the wall and the drop bottom enables the fount to be thoroughly cleaned and kept in a sanitary condition.

2-Quart, \$1.00. 1-Gallon, \$1.30. 2-Gallon, \$1.60.

DOUBLE WALL. Same as the single wall except that it is double wall in the place of single wall. The two cylinders forming the body of the fountain are sealed making a dead-air space between them. This construction is similar to the thermos bottle and gives the very best protection from both heat and cold.

1-Gallon, \$2.50. 2-Gallon, \$3.00.



TWO-PIECE DRINKING FOUNTS.

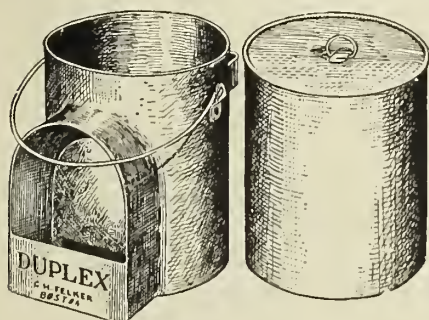
Furnishes a constant supply of fresh water which chicks cannot overturn and get into. Fount is well made of 28-gauge black iron, galvanized after fount is completed; this protects all edges from rusting. No parts to get out of order. The most simply constructed drinking fountain made.

Small, 35.; Medium, 45c.; Large, 60c.

SQUARE DROP BOTTOM DRINKING FOUNTAINS.

These drop-bottom drinking founts are new, and made of No. 28-gauge galvanized steel. The bottom can be swung open with one hand, as it is secured by one spring in the front, while most founts have a spring on each side, requiring both hands to open; even then they are opened with considerable trouble. The rod which extends through the hinge of the drop bottom is made of solid brass, preventing possibility of rust or of breaking off.

2 qt., \$0.90; 1 gal., \$1.30; 2 gal., \$1.60.



THE DUPLEX FOUNTAINS

The latest and most practical sanitary poultry fountain on the market. This is a double fount, easy to fill, and keeps the water clean and pure. Made in two sizes. Price, postpaid, 1-gallon size, \$1.45 each; 2-gallon size, \$1.72 each. Price by express, 1-gallon size, \$1.35 each; 2-gallon size, \$1.60 each.

THE PEERLESS HEATER



Description

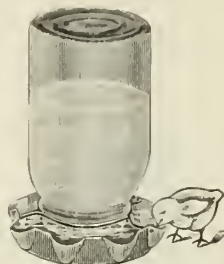
The base is an oil well. Holds one pint kerosene. Will last one week (day times). An air space between oil well and heat chamber makes it impossible for gas to form. In this heat chamber is a small burner connected to oil well by brass pipe. Around the burner is a circular shield; this protects the light and concentrates the heat to a small space on fount; in that way it never overheats the water. Inside, next outside wall is a wire gauze that prevents anything from being scratched into the heater. It is so ventilated that the light receives just the right amount of oxygen to burn smooth without smoke. It is impossible to get the outside wall of heater warm. Price.



Automatic Fountain and Chicken Feeder

This appliance for chicks feeds water, grain, grit, etc., automatically. It is an absolutely sanitary fountain made to fit any half-gallon, quart or pint Mason jar. Jars not furnished.

Price, 20 cents each



PEERLESS DRINKING FOUNTAINS

A heavy galvanized fountain made in two parts. The water is always pure. It is protected from dirt and filth. Easily cleaned by removing the bottom. The fowls cannot injure their combs when drinking. Simple in construction, durable and practical, can be hung up on a hook out of the dirt. Positively will not burst when frozen. Made in three sizes.

Price: 1-quart size, 35 cents; 5-quart size, \$1.00; 10-quart size, \$1.30.

THE PEERLESS FOUNTAIN for winter use may be used in connection with the PEERLESS HEATER. The combination when in use should be set against the wall and attached to it by either backstrap or bail on fountain; then it cannot be tipped over by the fowl and is absolutely safe.

FER-SUL

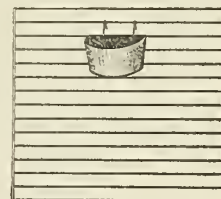
Kills Germ Diseases, Lice, Mites, Nits, etc., is a Tonic. Available everywhere on the farm as a Disinfectant, Antiseptic and Deodorizer. For poultry houses, cow barns, pig styes, etc. Invaluable as a flank and udder wash. Recommended by the highest authorities in animal and poultry husbandry. Cures Roup, Canker, Chicken Pox, Gapes and White Diarrhoea. Price, 12-ounce bottle, 75 cents; quart bottle, \$1.25; one gallon, \$3.00.



CAGE WATER CUPS

These water cups are specially designed for exhibition coops, etc.

Price, each... 40c



KEYSTONE FOUNTAINS

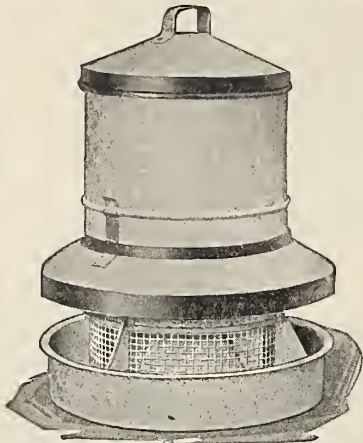


Galvanized

Easy to fill; easy to clean; a popular fountain. These Fountains have been tried by many prominent poultry raisers, and increasing business on them is evidence that they are all that is claimed for them.

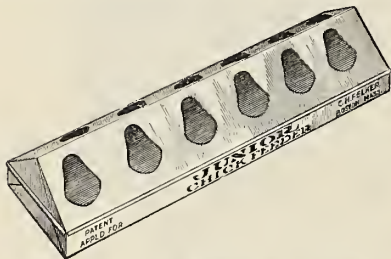
1 qt. size, 40c.; 2 qt., 75c.; 1 gal., \$1.00.

MINGLE'S ROUND HOPPER



This hopper is very popular with pigeon breeders, and is equally good for young chicks; made of finest grade galvanized steel; possesses eight sub-divisions (only four shown in cut); a neat, practical waste-proof hopper; holds 12 lbs. feed; movable or sliding hood. Price, \$2.00.

THE JUNIOR CHICK FEEDER



The JUNIOR CHICK FEEDER is practical and sanitary, will not waste feed. Chicks cannot foul it. Feeds Dry Mash or Hard Grain. Feeds Sour Milk or water. Easily cleaned.

Price..... 35 cents

WIRE HENS' NESTS

Heavy steel coppered wire. These nests are intended to be fastened with screws or screw hooks—if wanted removable. They afford no place for vermin and allow the air to circulate freely, advantages not obtained when wooden boxes are used. They are intended to be filled with straw. They are durable, sanitary, easily cleaned, convenient to handle and inexpensive. Each, 20c; dozen, \$2.00.

WIRE POULTRY NETTING

Best quality silver-finished wire. Galvanized after woven.

1 in. mesh 150 running ft. to the bale.	2 in. mesh 150 running ft. to the bale.
Per bale	Per bale
12 in. wide \$5.00	12 in. wide \$2.50
18 " " 7.00	18 " " 3.50
24 " " 8.50	24 " " 4.25
30 " " 10.00	30 " " 5.00
36 " " 11.50	36 " " 5.75
42 " " 13.00	42 " " 6.50

Not less than a full roll of Wire netting sold.

Staples for fastening netting.

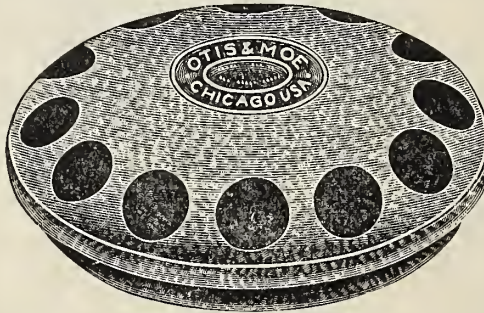
$\frac{3}{4}$ inch..... 15c per lb.



WALL CHICK FEEDER

Sloping top prevents the chicks from roosting on it, and a wire screen prevents them from wasting the food. Made in two sizes, 10 inches long and 20 inches long, of 28-gauge galvanized steel. Absolutely will not rust, for all turned edges are carefully painted. This is an entirely new invention, and has proved its worth and efficiency among the largest chick raisers in the world.

10 inch, 60 cents; 20 inch, 85 cents.



ROUND BABY CHICK FEEDER

Has sliding top, center of feeder is raised. All food slides to the holes, around edge of feeder. Made in two sizes only.

No. 12—12 hole.....35c
No. 11— 8 hole.....20c

STRAIGHT FRONT GRIT AND SHELL BOX



Price, 95c.

Having a perfectly straight front, the feed positively cannot clog. There is a lip in front to prevent fowls from wasting the feed, and iron rods prevent them from throwing it sideways. Can be set on floor or hung on wall. Has handle, or ball, for carrying. A big value for the money.

HANDY DRY MASH HOPPER



Years of experience with this type of Hopper, with changes from time to time to improve it, has enabled us to put on the market a Dry-Mash Hopper that fulfils every need. The wire grid is raised or lowered as required for coarse or fine mash. The curved bottom of the hopper always keeps the feed within easy reach of the birds. The flange at the edge prevents any possibility of waste, and the small wires extending from the flange to the wire grid prevents the birds from throwing the feed sideways out of the hopper. The most distinctive feature about this HANDY DRY-MASH HOPPER is the fact that it is an inch wider at the lower side than at the top, thus making it utterly impossible for the food to clog.

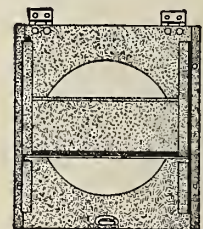
12-inch, 12-quart—Price..... \$1.75
18-inch, 18-quart—Price..... 2.25
24-inch, 24-quart—Price..... 3.50
36-inch, 36-quart—Price..... 4.50

DROPPING BOARD SCRAPER

The only device that has ever been made for this work. It has a blade 13 inches wide, enabling the operator to perform a lot of work in a short time. It gets in the corners easily and has a sharp crimped edge on the upper side which is used to loosen up any hard substance.

Price..... \$1.50

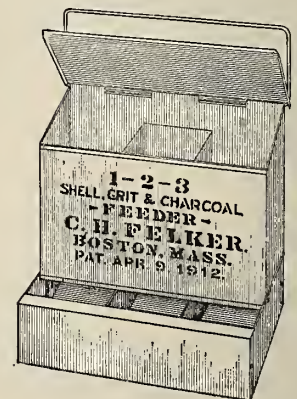
TRAP NEST FRONT



We have added this useful device to meet a popular demand. Easily attached to any square box. Works like a charm.

Price, 60c.

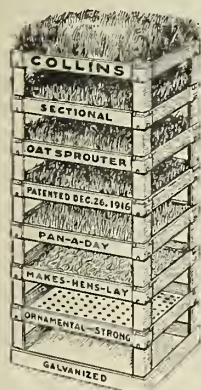
1-2-3 POULTRY FEEDER



For dry mash, scraps, shells, grit, charcoal or any poultry feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders. Price, \$1.30.

Why a Collins Oat Sprouter Will Earn You Money

It Will Make Hens Lay When Eggs Bring High Prices



Whether you keep a few birds in the back yard or run a big commercial plant, you want eggs during the Winter months. And, to get eggs at that time you must make conditions like those of Springtime, when the hens lay naturally. In the Spring, there is always plenty of fresh green grass. But you can furnish Winter greenfeed at small cost which is quite as palatable and even more nourishing. Sprouted oats will "make the hens sing" in zero weather.

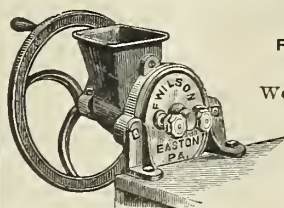
IT WILL SAVE GRAIN AND THAT MEANS A LOT THESE DAYS

In a Collins Sprouter, the bursting oat grains draw on the water and air for nourishment, and, combine these elements into wholesome nourishing green feed that will make your grain go 200% farther than when fed in the ordinary way.

8 Pans 11x15—the Popular Size.. \$5.00
5 Pans 11x15, Small Back Yard Flock.. 3.50
8 Pans 11x32—for BIG Business.. 9.00

Weight
14 lbs.
9 lbs.
28 lbs.

MINGLE'S No. 1 GRINDING MILL



Price, \$5.00.

Weight 33 lbs

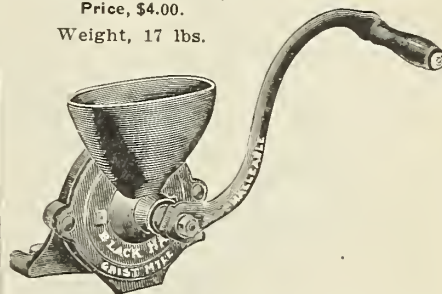
Especially made to grind or granulate Dry Bones, Shells, Charcoal, Corn, etc. All grinding surfaces in these mills are extremely hard.

MINGLE'S No. 0 FAMILY GRIST MILL

This mill is made to grind Graham Flour, Rice, Cornmeal, or any cereal for table use. Can be adjusted for cracking grain also. Weight 29 lbs. To bolt to bench or table. Price, \$6.00.

Price, \$4.00.

Weight, 17 lbs.



BLACK HAWK GRIST MILL

Bolts to table or bench. A good machine; grinds fine or coarse any kind of cereal. All bearings are chilled.

CAPONIZING SET



Do your own caponizing, made easy with these tools. To caponize is to make the finest meat grown under feathers.

Farmer's Set, \$2.75.
Phila. Set, \$3.25.



"VICTOR"

Aluminum Leg Bands. In colors with printed numbers.

Victor Bands combine beauty, safety, durability, comfort, convenience and

high visibility.

Five bright colors—Red, White, Blue, Green and Yellow.

Made of aluminum with celluloid number plate. Smooth finish, cannot injure leg. Large size. Light weight. A combination which insures comfort. A safe band, easily put on and will stay on. Adjustable to any size leg. Suitable for any breed. Prices prepaid.

Sets Numbered	Price
1-12.....	\$0.60
1-25.....	1.10
1-50.....	2.05
1-100.....	4.00



"SPIR-OL"

Celluloid Leg Bands

The most popular Band for poultry; made in ten distinct shades and colors; Blue, Pink, Amber, Black, Red, White, Green, Dark Blue, Yellow, Purple; pigeon and chick size; medium, Mediterranean; Large, American and Asiatic. Doz., 15c.; 100, 95c.; 1000, \$8.50. Price postpaid.



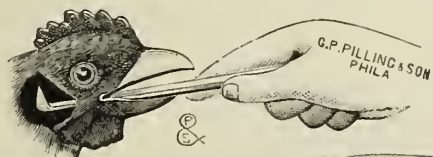
"ALUMINUM"

Adjustable Leg Bands

Adjusted to fit the leg of any size fowl. It locks with a double clamp, fits the leg perfectly, and, once on, stays until you remove it. They are sold in sets, and numbered consecutively. The numbers are always clear and distinct. Trappers and show bird breeders will readily recognize the value of this numbered band.

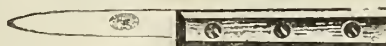
Sets Numbered.	Price per Set.
1 to 12.....	\$0.15
1 to 25.....	.25
1 to 50.....	.45
1 to 100.....	.85

POULTRY AND SQUAB KILLING KNIVES

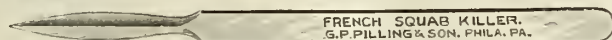


Progressive, 65c.

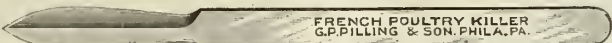
The quickest and most humane manner of killing poultry and squabs.



Mingle's Swift Sure, 35c.

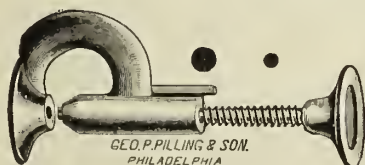


French Squab Killer, 65c.

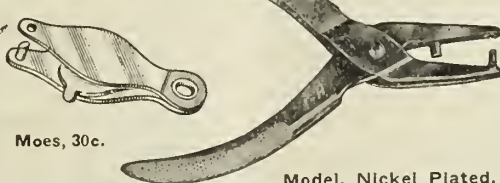


Pilling's Poultry Killer, 65c.

POPULAR POULTRY PUNCHES OR TOE MARKERS



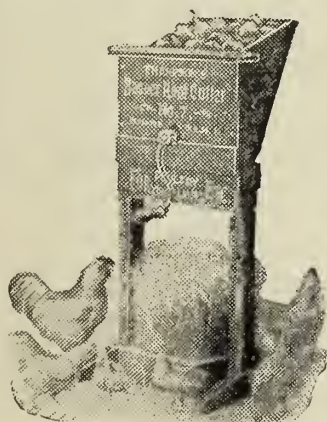
Philadelphia Punch, 50c.



Moes, 30c.

Model, Nickel Plated.

Banner Root Cutter No. 7



The Banner Root Cutters cut beets, turnips, carrots, onions, potatoes, cabbage, mangels and all other roots and vegetables; they cut fast, fine and are easy running; leaves the feed in fine ribbon-like strips that make choking impossible. The knives are adjustable and are made of the very best of steel. An iron grate in bottom of hoppers lets dirt and gravel escape before reaching the knives.

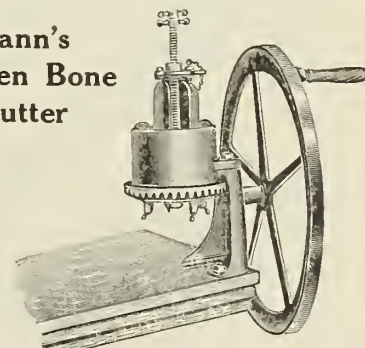
No. 7—Poultry Size, \$6.50

No. 20—Poultry and Stock. Capacity 30 to 50 bushels, per hour, \$15.00

Banner Root Cutter No. 20



Mann's Green Bone Cutter



Green cut bone is one of the best foods for winter egg producing; we offer three sizes of this cutter.

No. 5C—To bolt to table, has crank handle, only, \$9.50.

No. 5B—To bolt to table, has flywheel (See cut), \$12.50.

No. 5 B. M.—Has iron stand and flywheel, \$16.50. No freight allowed on these cutters.

PLANET JR. FARM AND GARDEN TOOLS

Planet Jr. tools are the most carefully designed and constructed; built of the finest materials, and are the most economical because they outlast others and do better work. 72 page catalog, nearly 200 illustrations, free. Send a postal.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow.

No. 4. Price Complete, \$22.75

No. 4-D. As a Seeder, only, \$18.00

Holds $2\frac{1}{2}$ Quarts of Seed.



Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily all through the season.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe.

Price, \$25.75.

Holds $2\frac{1}{2}$ Quarts of Seed

Steel Frame



No. 25 is for gardeners, who have enough acreage for a double-wheel hoe to be used, and yet prefer not to buy seeders and wheel hoes separately; also for onion growers and for the large family garden where both a single and double-wheel hoe can be used to advantage. Is a perfect seeder, and combined double and single-wheel hoe. Unbreakable steel frame. Capacity—2 acres a day.

No. 31 Combined Seeder and Wheel Hoe.

Price, complete, \$14.75.

As a Seeder only (No. 31-D), \$11.75.

As a Wheel Hoe only (No. 33), \$7.50.

Holds one quart

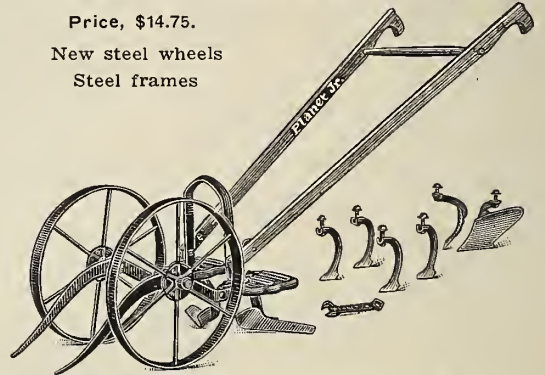


The ideal tool for small gardens—combining a reliable seeder for all garden seeds from the smallest up to peas and beans, with a light running Wheel Hoe. Practical for men, women or growing boys. Sold at a price that will make it pay to use even if your garden is a very small one. Stop in and see them. It's worth your while.

No. 12 Planet Jr. Double and Single Wheel Hoe.

Price, \$14.75.

New steel wheels
Steel frames



Price with hoe only (No. 13), \$10.25.

Planet Jr. Wheel Hoes have been greatly improved for 1916, but we have not advanced the price. No. 12 has new 14 in. steel wheels, steel frames, steel arch, steel leaf lifters. The Hoe's cultivator teeth and plows are specially hardened to give longer wear, scour better and run easier.

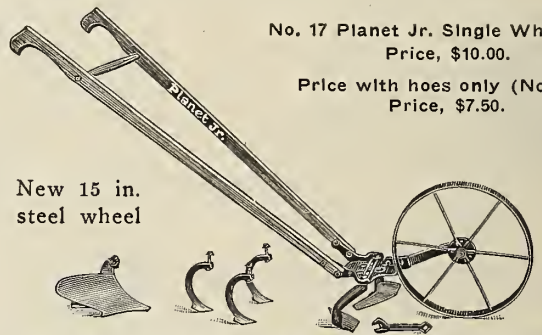
The greatest hand-cultivating tool in the world.

No. 17 Planet Jr. Single Wheel Hoe.

Price, \$10.00.

Price with hoes only (No. 18),
Price, \$7.50.

New 15 in.
steel wheel

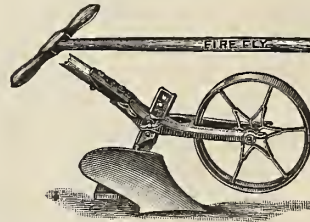


The highest type of Single Wheel Hoe made. Light, but strong, and can be used by man, woman or boy. Will do all the cultivation in your garden in the easiest, quickest and best way.

Indestructible steel frame. New steel wheel, specially hardened attachments will do better work and last longer.

Fire-Fly Garden Plow.

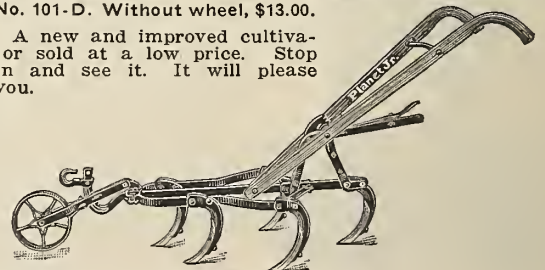
Price, \$4.75.



Especially useful to owners of small gardens, and to chicken raisers for plowing up scratching-yards. Its light weight makes it easy for man, woman or boy to use. Enables the owner of a family garden to do all the work in spare minutes.

No. 101 Planet Jr. Cultivator. Price with wheel, \$15.00.
No. 101-D. Without wheel, \$13.00.

A new and improved cultivator sold at a low price. Stop in and see it. It will please you.



We are Headquarters for Planet Jr. Tools. Come get yours.

IRON AGE Garden Seed Drills, Wheel Hoes and Cultivators

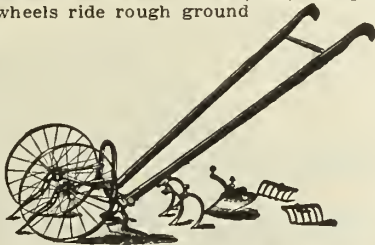
No. 306 Drill and Wheel Hoe, Price, Complete, \$24.00



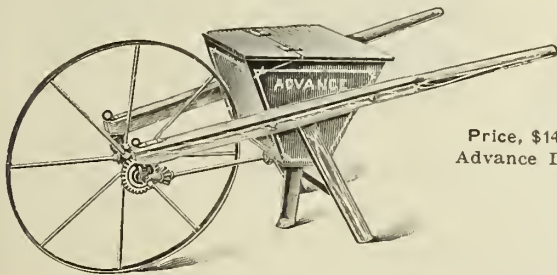
No. 6 sows all kinds of small garden and flower seeds accurately, in rows or in hills 4 to 24 inches apart. Opens furrow, sows seed, covers, packs and marks next row in one operation. Then this tool can be used to hoe, cultivate, weed, level ground, open furrows and cover them, ridge growing crops, etc. As a wheel hoe can be used astride young plants or between the rows. Worked with a push ahead, a step at a time. A woman, boy or girl

can do it. 16 inch steel wheels ride rough ground easily. Steel tube frame.

301-R is the wheel part of No. 306. The seed attachment can be applied any time, and can be put on in three minutes.



No. 101 Wheel Hoe, Price \$15.00.

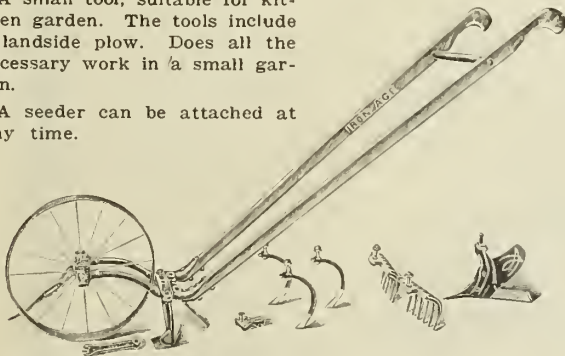
Price, \$14.35.
Advance Drill.

The best low-priced fertilizer distributor on the market. Also, a first class tool for drilling corn, beans and peas. Galvanized disc and lining. 18 quart hopper. Gear feed makes it positive. High wheel runs easy. Can be used with a horse.

No. 320-R.

A small tool, suitable for kitchen garden. The tools include a landside plow. Does all the necessary work in a small garden.

A seeder can be attached at any time.

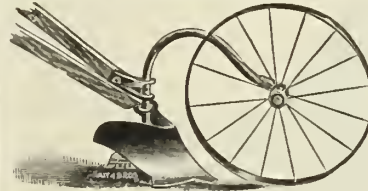


No. 320-R Wheel Hoe. Price, \$11.00.

Ask for IRON AGE Booklets describing each line complete.

No. 19C.
24 inch wheel.
Price, \$7.00.

No. 19C. This tool will do all the necessary plowing in some soils, open furrows for seed or fertilizer and covers on the return trip. Has special teeth for work between narrow rows. Size of the wheel makes it easy to push ahead a step at a time.



No. 11 Wheel Plow, Price, \$5.00.

No. 11 Wheel Plow. A light, low-priced tool that can be used as a wheel plow anywhere, but is especially recommended for use in poultry yards. Scatter some oats and turn them under so the chicks will scratch

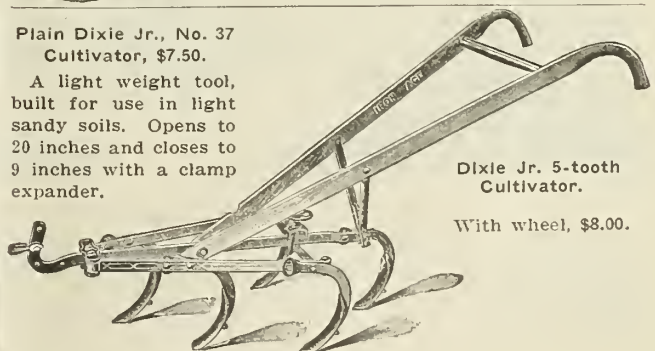
for them. Also keep the yard clean and sweet.

Gem Single Wheel
Hoe.

Light, strongly built tool with smaller wheel, scuffle hoes for work between rows, pair of plows and five teeth.

Gem Single Wheel
Hoe.
Price, \$9.00.Plain Dixie Jr., No. 37
Cultivator, \$7.50.

A light weight tool, built for use in light sandy soils. Opens to 20 inches and closes to 9 inches with a clamp expander.

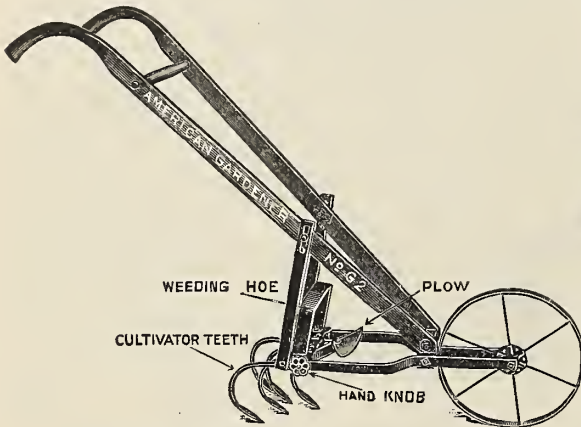
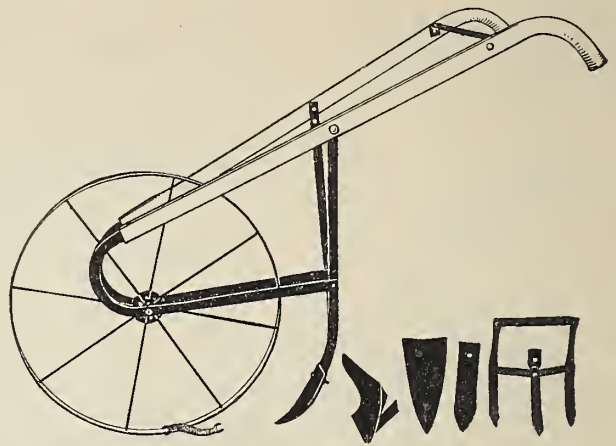
Dixie Jr. 5-tooth
Cultivator.

With wheel, \$8.00.

SUPERIOR GARDEN PLOW

The Superior Garden Plow has two bent wood handles. The frame and tools are constructed of steel, and are mechanically correct, making it one of the neatest and lightest-running plows on the market.

The handles can be raised or lowered to suit operator. This plow is equipped with shovel hoe, plow, two cultivator steels and weeder; also one wrench. Height of wheel, 24 in. Price, complete, \$4.00.

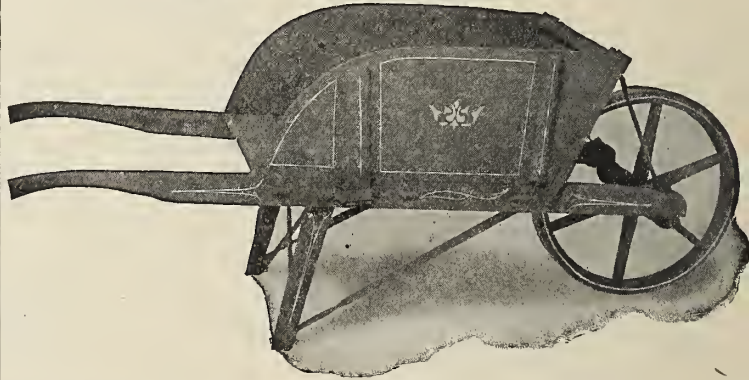


THE AMERICAN GARDENER

The AMERICAN GARDENER, No. G2, is the most talked of and best selling general purpose cultivator on the market. It plows, cultivates or hoes by simply turning the Hand Wheel—three implements in one. Weight, 20 pounds. The Midget Seeder or large Turning Plow, sold as extras, may be easily attached in place of Drill Plow.

No. G2. American Gardener.....\$8.00

WHEELBARROWS, GARDEN AND FARM.



These Barrows are made from well seasoned lumber, very strongly bolted together, extra braced, with high finish. If you want a barrow to give service—one that will stand not only use but abuse—then this is the one—"the Buch."

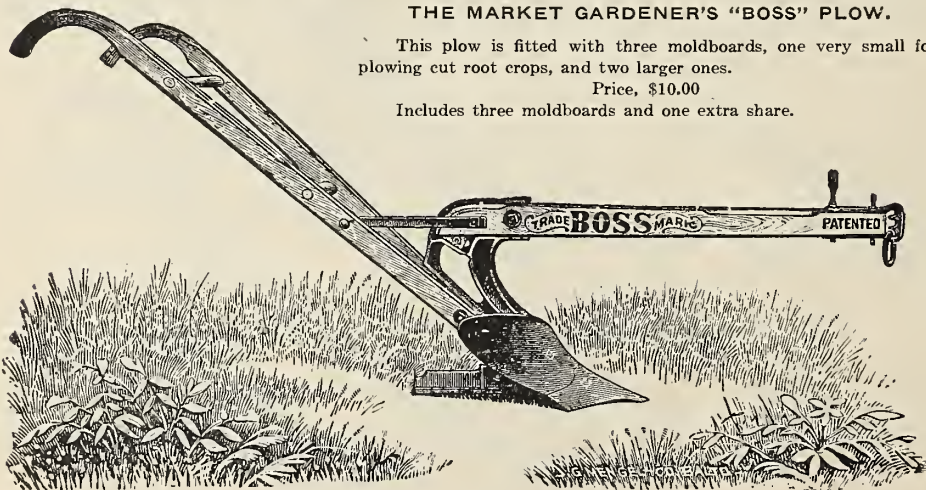
No. 1—Large Farm Barrow, 3 inch tread.....	\$10.50
No. 2—Small Farm Barrow, 2 3/4 inch tread.....	8.75
No. 3—Garden Size, 2 1/4 inch tread.....	7.85
No. 3—Garden Size, 1 1/2 inch tread.....	6.25
No. 4—Small Garden Size, 1 1/4 inch tread.....	5.50

THE MARKET GARDENER'S "BOSS" PLOW.

This plow is fitted with three moldboards, one very small for plowing cut root crops, and two larger ones.

Price, \$10.00

Includes three moldboards and one extra share.



List of Parts.

Double moldboard and share.....	\$1.25	Standard, complete.....	\$3.00
No. 2 1/2 Moldboard.....	1.10	Cabbage Moldboard.....	.55
No. 2 Moldboard.....	.85	Landside.....	.50
No. 1 1/2 Moldboard.....	.75	Shares.....	.40
Beam with clevis.....	1.40	Beam without clevis.....	.95
Handles complete.....	1.40		

HOE AND RAKE COMBINED.

An excellent tool for the garden. Made of the very best steel.

Price,
4 prong, 90c.
6 prong, 1.00



GARDEN TROWELS



No. D. S. T. Steel Shank.....	\$.80
No. 100 Heavy Socket Long Handle.....	.60
No. 10 One-piece Extra Heavy.....	.50
No. 9 Six-inch Socket Shank.....	.30

TRANSPLANTING TROWELS

No. 020 Narrow Blade.....	\$.20
No. 20 Six-inch Narrow Blade.....	.15

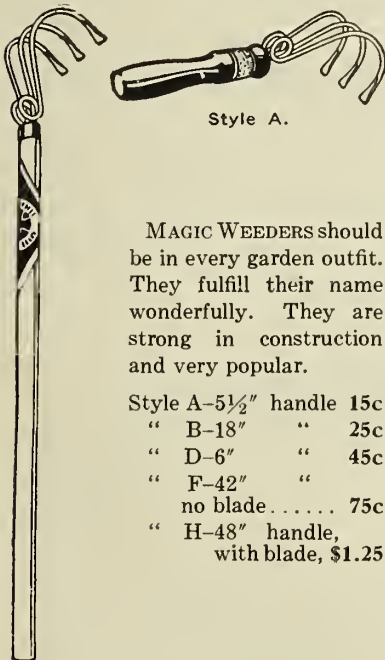
TROWEED TROWEL

Trowel and Weeder combined.....	\$.50
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GARDEN SET

No. 100 consists of heavy Shank Hoe, heavy five-tooth Malleable Iron Rake and heavy six-inch English Pattern Trowel. Finished in Red Enamel. Fine finished handles.
Price per set three pieces..... \$1.25

MAGIC WEEDERS.



Style A.

MAGIC WEEDERS should be in every garden outfit. They fulfill their name wonderfully. They are strong in construction and very popular.

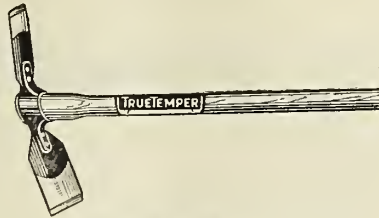
Style A-5½" handle	15c
" B-18" "	25c
" D-6" "	45c
" F-42" "	
no blade.....	75c
" H-48" handle,	
with blade,	\$1.25

Style B.

HEDGE SHEARS (ENGLISH MADE).

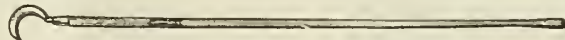


8 in.	\$1.90
9 in.	2.25
10 in.	2.50



GARDEN MATTOCK.

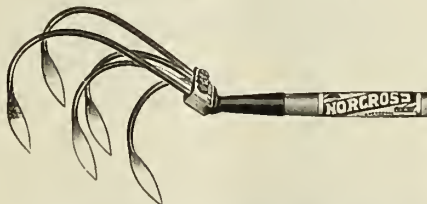
True shapes (as in cut).....	\$1.50
Long Cutter or Axe, pointed.....	1.75
Half Mattock or Grub.....	1.60
Heavy Stub or Accomac.....	1.50
All the above include handles.	
Picks, double pointed, either cutter pointed or regular style with handle,	

Transplanting Trowel.
Price, 75c.Garden Dibble.
Price, 50c.Transplanting Hoe.
Price, \$1.00Fig. 43. Vine Cutter. Price, \$1.00.
For cutting sweet potato vines, etc. Saves the back.

GIBBS POST HOLE DIGGER.

Digs a hole 3½ feet deep. A positively good tool.
Price \$3.00

NORCROSS CULTIVATOR.



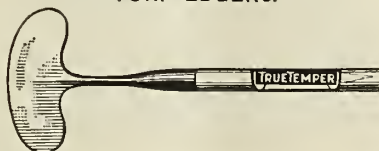
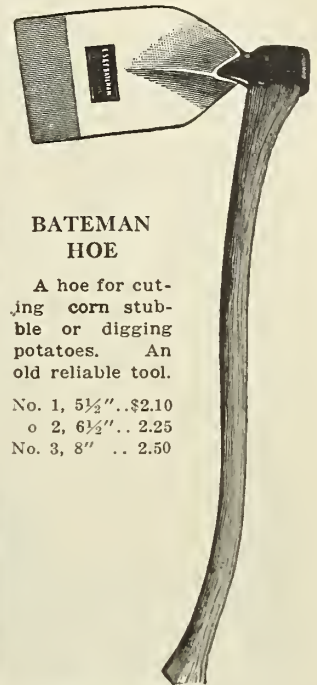
An excellent tool, adjustable teeth for spanning the row by removing centre tooth, or between rows using any number of teeth. We carry two sizes.
5-prong, price.....\$1.00
3-prong, price......80

SPADING FORKS.



Fine quality steel. Strapped shank. D handle.
Four prong..... \$1.50
Boys' or ladies'..... 1.15
Five prong, extra quality..... 2.25

TURF EDGERS.

For trimming paths.
No. 11 \$.90BATEMAN
HOE

A hoe for cutting corn stubble or digging potatoes. An old reliable tool.

No. 1, 5½".....	\$2.10
" 2, 6½".....	2.25
No. 3, 8" ..	2.50

GARDEN SET.



A popular combination of three tools, used by ladies, children and for special uses where small tools are required.
No. 3 P. F. per set.....\$1.50

GRASS HOOKS



Little Giant.....	\$0.75
" " , Jr.....	.60
" " , Adj.....	.50
Eng. Rivet Back.....	.85
Mingle's Special.....	.35

**SHOVELS****Short D Handle**

Round point..\$2.25

Square point.. 2.25

Long Handle

Round point..\$2.25

Square point.. 2.25

SPADES**Short D Handle**

Pheiffer.....\$2.25

Floral Spade.. .95

Nursery Spade 3.25

SCYTHE STONES

Darby Creek.....\$0.18
 English Round......25
 Carborundum......40

PULL EASY CULTIVATORS

These cultivators can be adjusted to any width.

P. E. J., 4 teeth, with 4-foot handle, adjustable, 2 to 6-inch Rows, 75c. each.

P. E. J., 5 Teeth. Handle 4 foot long, adjustable 6 to 12 inches. \$1.25.

P. E. C., 9 teeth, 4½-foot handle. Will cultivate rows 6 to 18 inches wide. \$1.50 each.

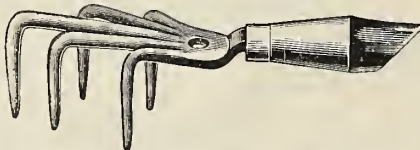
EUREKA FORK.

For potting flowers, etc. Good quality steel.

Price, 50c.

EUREKA WEEDER.

A good tool for scratching about plants. Price, 50c.

MINGLE'S SPECIAL WEEDER.

Five teeth, good quality. Price, 15c.

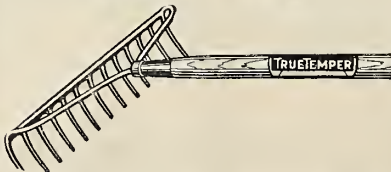
PROTECTING CLOTH FOR HOTBEDS

We sell medium brown color at 25c yard; heavy brown cloth at 42c a yard.

SIDEWALK CLEANER.

American.

7 in. blade—4 ft. handle..... 55c.
 Good quality—4 ft. handle.....45c.

STEEL BOW RAKE.

The teeth have a slight curve as shown in cut. Some people prefer this style.

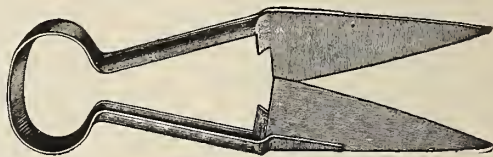
B 10—10 tooth, 80c. B 12—12 tooth, \$0.90
 B 11—11 tooth, 85c. B 14—14 tooth, 1.00

BASKETS**Chip baskets—with handles**

¼ bushel..... 15c
 ½ bushel..... 20c
 ¾ bushel..... 25c

Garden baskets—with handles

½ bushel..... 95c

**GRASS SHEARS.**

Polished, fine steel\$0.65
 Good quality50

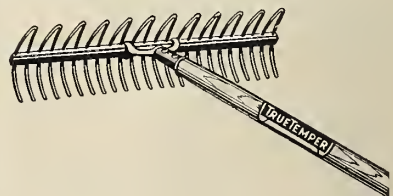
STRAIGHT TOOTH GARDEN RAKE.

10 tooth, malleable.....\$0.40
 12 tooth, malleable......45
 12 tooth, extra quality steel......70
 14 tooth, extra quality steel......75

MANURE DRAGS.

For working manures, digging out potatoes, etc.

No. 4 B. O. L., 4½ tine.....\$1.00
 No. 4 B. O. H., 4½ tine..... 1.15
 No. 5 B. O. L., 5 tine..... 1.25
 No. 5 Batchellor..... 1.50

"QUEEN" LAWN RAKES

Heavily tinned steel teeth. The arched teeth for litter and the opposite side for fine-cut grass. Heavily braced, bolted socket.

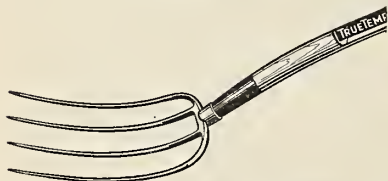
24 teeth—Price, 85 cents

**OLE OLSEN LAWN RAKE.**

Rake head slightly curved from centre to each end which does not allow any material that has been caught by the teeth to slip around the edges. 26 tooth Hickory wood. Price, \$1.00

ONION HOE.

Two prong, very useful in working narrow rows. price, 45c.

MANURE FORKS.

No. 04D—4 tine, strapped shank, D handle \$1.55
 No. 04DZ—4 tine, strapped shank, Dhandle 1.00
 No. 044½Z—4 tine, plain ferrule, bent handle 1.00

HAY FORKS.**Strapped Shanks.**

2 tine.....\$1.10
 3 tine..... 1.25

GARDEN HOES.

The Warren or Pointed, a quite popular style. No. W. 7\$1.00
 No. R..... 70c.

Baby Warren Hoe. A good transplant-er, same shape as above; very short handle.

Price 50c

TREE PRUNERS

DISSTON TREE PRUNERS WITHOUT
POLE OR ROPE

Disston's LITTLE GIANT Pruner.....	\$2.80
Disston's LITTLE GIANT Pruner with Saw Attachment.....	3.75
Telegraph Pruner.....	2.00
Disston's Orchard Hook and Saw....	3.50

Poles for Tree Pruners

12 ft. long.....	\$2.00
14 ft. long.....	2.25

WATERS TREE PRUNERS. Removable
blade, which can be renewed when
worn out:

Plain, without Pole.....	\$1.25
With Removable Cutting Blades and Pole complete:	
4 ft.....	1.35
6 ft.....	1.50
8 ft.....	1.75
10 ft.....	2.00
12 ft.....	2.25
Extra Knives.....	each .25



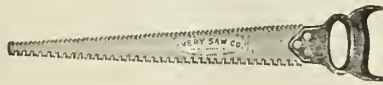
HAND PRUNERS



Our pruning shears are procured from the most reliable makers and all are fully guaranteed.

65 Pexto.....	\$1.50
R165 Pexto.....	2.50
R170 Pexto.....	2.75
No. 55, Fine Polished.....	1.00
No. 50, California Style, 9 in.....	.80
No. 0, Medium Grade.....	.50
No. R50, California Style, Ratchet Nut...	1.00

PRUNING SAWS



No. 40—18-inch Double Edge.....	\$1.30
No. 7—18-inch Single Edge.....	1.75
18-inch Paragon curved double Edge....	1.50
Disston California—14-inch Blade.....	1.50

Swivel Saw:

Very handy for getting among closely branched limbs, blade can be swiveled around in the frame to suit any desired position.

Handles can be unscrewed and a pole attached when desired.

Price.....	\$2.00
Extra Blades.....	each .40

AXES.



Fine tempered steel.

Kelly, with handle.....	\$2.50
Red Warrior, with handle.....	2.25
Plumb—Without handle.....	2.50

Handles

Made from the best white Hickory:

Axe Handles.....	\$0.50
Hammer Handles.....	.20
Hatchet Handles.....	.20

TREE SCRAPERS

For removing loose bark from trees prior to spraying. Steel blade may be detached and sharpened.

No. 5, Short Handle.....	60c
--------------------------	-----

CLYDE TREE LOPPERS.



20 in. Plain Style.....	\$3.00
24 in. Compound Leverage.....	3.50

ENGLISH BILL HOOKS

For trimming heavy shrubbery, trees, etc.

Short Handle.....	45c
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GRAFTING WAX.



The one easiest to apply and put in convenient packages.

¼ lb., 15c.; ½ lb., 25c.; 1 lb., 45c.; 5 lbs.,	\$2.00
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GRAFTING TOOLS

Made of the best steel. For grafting trees, etc.

All steel.....	85c
Grafting Mallet.....	80c

MOLE TRAPS.

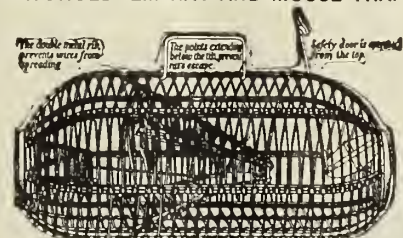
One of the most successful traps; never misses.

Reddick, \$1.00

HOW TO CATCH MOLES

Always press down the mound when setting the trap so that the lever which gets off the trap is level with the ground. Set the trap in the evening, as moles usually stir around early in the morning.

THE HOLD 'EM RAT AND MOUSE TRAP

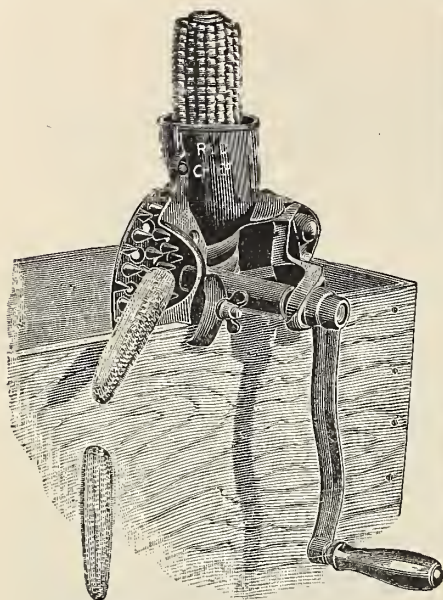


The best selling Traps. Double metal. Ribs prevent wires from slipping. Rat..... \$0.75



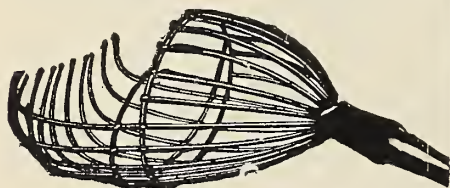
KILLS RATS AND MICE Without Odors

25c 50c \$1.00

**RED CHIEF CORN SHELLER**

This sheller is an excellent one for small poultry farms. Fastens to box or barrel. Shelled corn drops in box, cob thrown outside.

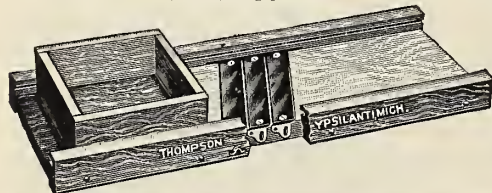
Price\$3.25

**PERFECT FRUIT PICKER**

Made substantially of galvanized wire. Can easily be attached to a pole of any length. Price, 45c.

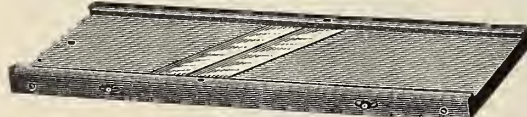


DANDELION PULLER. Price, 40c.

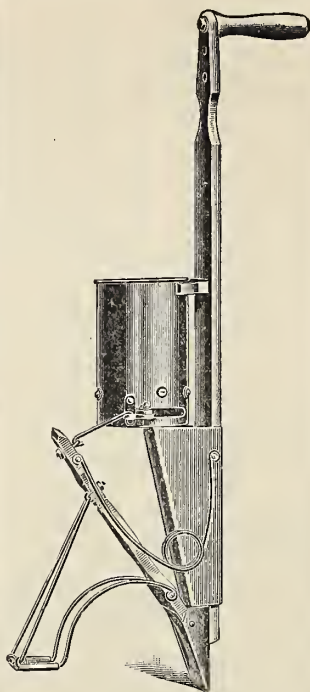
KRAUT CUTTER

Made of hard maple, heavy construction, adjustable knives, best knife steel. Sliding hox; wood or metal bed.

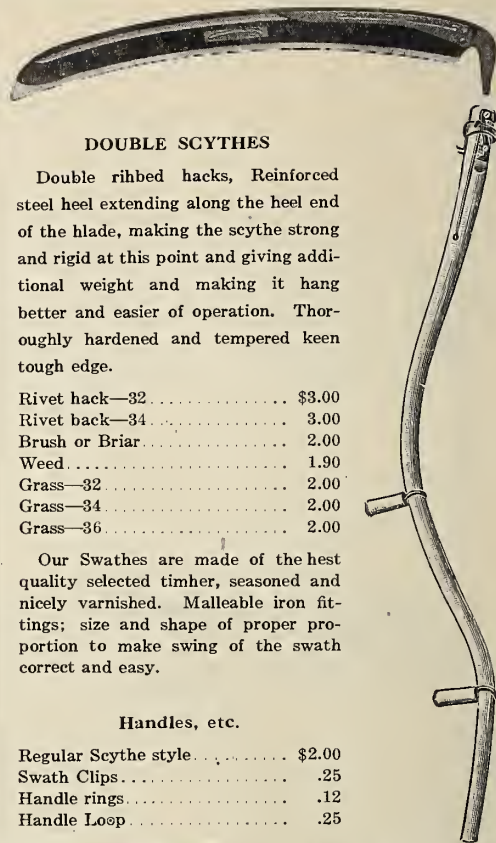
SIZE	KNIVES	PRICE
9 x 25	2	\$2.25
9 x 25	3	2.50
11 x 33	2	3.50

SLAW OR CABBAGE CUTTER.

Made of hard maple. Heavy construction, adjustable, best knife steel. Two blades. Price, 45c.

**HAND CORN PLANTER**

The AMERICAN. The best hand dropper; possesses automatic metal cut off, easy to set. Price, \$3.15.

**DOUBLE SCYTHES**

Double ribbed hacks, Reinforced steel heel extending along the heel end of the blade, making the scythe strong and rigid at this point and giving additional weight and making it hang better and easier of operation. Thoroughly hardened and tempered keen tough edge.

Rivet hack—32.....	\$3.00
Rivet hack—34.....	3.00
Brush or Briar.....	2.00
Weed.....	1.90
Grass—32.....	2.00
Grass—34.....	2.00
Grass—36.....	2.00

Our Swathes are made of the best quality selected timber, seasoned and nicely varnished. Malleable iron fittings; size and shape of proper proportion to make swing of the swath correct and easy.

Handles, etc.

Regular Scythe style.....	\$2.00
Swath Clips.....	.25
Handle rings.....	.12
Handle Loop.....	.25



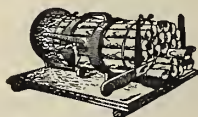
CONCAVE ASPARAGUS KNIFE. Price, 45c.
Some growers think the concave knife takes hold better.



FLAT ASPARAGUS KNIFE. Price, 35c.
An asparagus knife is a necessity for large or small growers. Crop will be gathered in better shape and time saved.



FISHTAIL ASPARAGUS KNIFE. Price, 45c.
Ten-inch blade, drop forged, well ground, enameled shank. A handy tool, also, for cutting out weeds on the lawn.

ACME ASPARAGUS BUNCHER

Even where one has a limited amount of asparagus to market, it pays to use a buncher. It is tied quickly and looks uniform. Price, with knife guard, \$3.50.

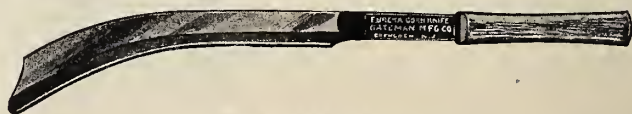
Asparagus Tape, 1000-yd. spools.

Asparagus Twine—Jute, 20c ball.

In quantity—price on application.

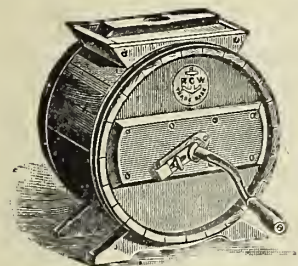
HAY KNIVES**AMERICAN**

Straight Blade and Shank Sickle. Edge polished and honed. Cast steel Sectional serrated blade riveted to Malleable iron frame. Six-inch hardwood handle bolted on. Cutting edge, 18 1/4 inches. Will cut loose or packed hay, straw, etc., for feed from hay stack, mow or hale. The handle can be placed on either side of blade to suit right or left-handed persons, set at any angle to suit operator. Sections require no sharpening unless injured by accident. Price

**CORN KNIFE. Price, 75c.**

Oil hardened and temper drawn. Wood handle. You will find this a first-class tool and dependable.

RICHMOND CEDAR BUTTER CHURNS.



One of
the best;
easy to
clean.

No. 1—3-gallon	\$4.25
No. 2—4-gallon	5.00
No. 3—7-gallon	6.75

BUTTER PRINTS.

Made of Hard Maple Wood, three pieces to set, square. 1 lb. size, 65c.

CIDER OR WINE PRESSES.



These presses are very substantially built of hard wood and well bolted together.

No. 1.....	\$13.25
No. 2.....	16.50
No. 2½.....	18.00
No. 3.....	22.50
No. 4.....	28.00
No. 2½, Hinged Tub.....	20.00
No. 3, Hinged Tub.....	21.50
No. 4, Hinged Tub.....	30.00

Combined Grinders and Presses.

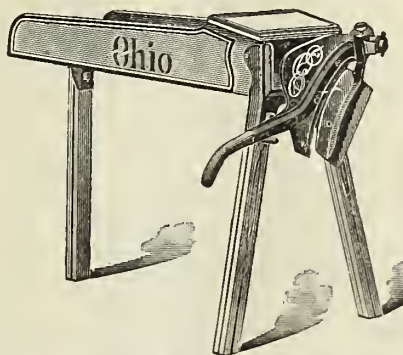
Self-Feed.....	\$20.40
Junior No. 1.....	28.00
Medium.....	31.25
Senior.....	43.50

CANVAS GLOVES.

Suitable for all kinds of outdoor work.

Plain Canvas, pair	15c.
Leather Tips, pair	20c.

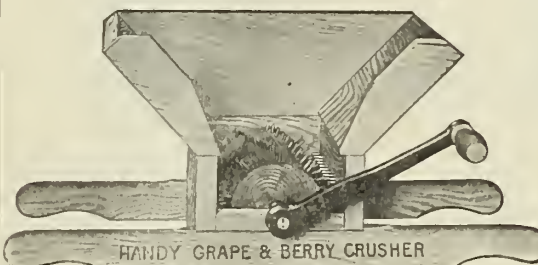
OHIO OR BANNER FODDER CUTTER.



Has 11 in. oil-tempered steel knife; possesses adjustment to take up wear. Can be set to cut any length desired. Shipped knocked down. Weight, 50 lbs.

Price, \$9.00.

FRUIT GRINDERS.



HANDY GRAPE & BERRY CRUSHER

Made of hard wood, first class in every particular. Grinds any kind of berries, apples or grapes. Price, \$9.00.



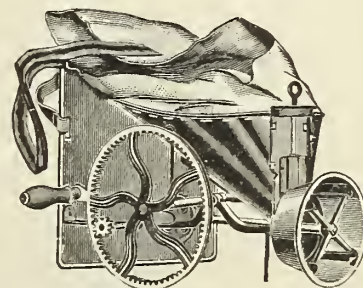
Cyclone (New Improved Model). An accurate portable seeder, for all broadcast sowing or fertilizing. Fits comfortably over shoulder; provided with automatic adjustment for stopping flow of contents when required. A great time and labor saver. Each, \$2.75.



MALT AND HOPS

BLUE RIBBON MALT EXTRACT and Hops. Guaranteed 100% pure. For baking purposes and HOME BEVERAGES. One can BLUE RIBBON EXTRACT (2½ lbs.) with 2½ ozs. best grade Hops, \$1.50.

CAHOON SEED SOWER.



For sowing all kinds of seeds; has very perfect regulator. Sows from four to eight acres per hour. A superior machine. Price, .. \$5.00

WOOD FAUCETS



Made of the best Black Walnut, 10 inches long. Price, 45c.

GRAPE BAGS

For protecting growing grapes against the ravages of birds, insects, etc. Easily attached and lasts a season. Fruit will ripen just as readily in bags as it does in the open. Bags should be attached when grapes are about the size of a pea and should be left attached until the fruit is ready to harvest.

2-lb. size.....	40c. per 100
3-lb. size.....	50c. per 100
4-lb. size.....	60c. per 100

WHITE OAK KEGS



The above cut shows our handsome WHITE OAK (quarter sawed) kegs, for holding wines, fruit juices, extracts, etc. They are carefully made of selected WHITE OAK, hound with heavy steel hoops, and nicely varnished.

Gallons.....	5	10	15	30	50
Price, each ..	\$2.75	\$3.40	\$4.50	\$6.00	\$8.00

SPRAYERS

Hand — Compressed Air — Bucket and Barrel

NO. 30 IDEAL SPRAYER

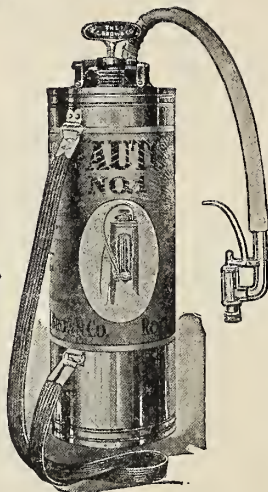
BRASS AUTO SPRAYER.

MYERS BUCKET PUMP.



One of the most popular "one man" machines made. All working parts made of brass. Capacity, 15 gallons. Equipped with 10 foot, $\frac{3}{8}$ -inch spray hose, $\frac{1}{4}$ -inch. iron pipe extension, 8 feet long. Fog nozzle and leakless shutoff.

Price, \$35.00



Convenient Durable Efficient
Will do better work than most any other. Made in Brass or Galvanized Iron. A few strokes of the plunger compresses enough air to exhaust contents of sprayer.

No. 1A Brass Tank with stop cock.....	\$9.75
No. 1B Brass Tank with auto spray.....	10.25
No. 1C Galvanized Tank with stop cock....	7.00
No. 1D Galvanized Tank with Auto Spray .	7.50

BROWN'S NO. 5 BRASS AUTO SPRAY PUMP.



Not mounted on tank with length of hose and strainer. Price, \$5.00

Galvanized reservoir or knapsack.....\$3.50
Extension pipe, brass......60

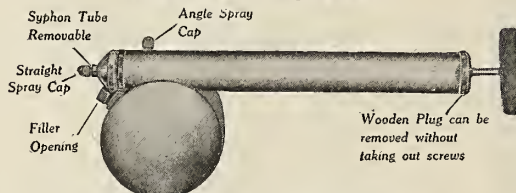
One of the latest in knapsack line. Can be used without the reservoir if barrel or bucket is more convenient.

We sell all parts for Brown's Sprayers. Send for booklet giving prices.

SPRAY NOZZLES AND FITTINGS.

Auto Spray (see cut).....	\$0.60
Auto-Pop (see cut).....	1.60
Non-Clog Jr.....	.75
Fembro or Power.....	.75
Imperial.....	.45
Graduating Vermorel.....	.75
Bordeaux.....	.95
Brass Male End Coupling.....	.30
Brass Female End Coupling.....	.30
Brass Elbow (see cut).....	.30
Brass Bend, either .. or $\frac{1}{8}$ in.....	.40

BRASS AUTO SPRAY.



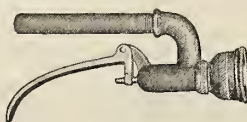
A continuous fine spray, just the thing for house and garden use. Price, \$1.50.

AUTO-SPRAY NO. 6

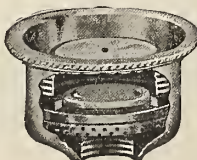
Is equipped with malleable iron foot-rest, with a clearance of 16 inches, big, easy-grip iron handle. Brass suction strainer is made of brass casting and screen of large surface. The hose is 3 feet in length and is of extra quality.

Each pump is furnished with two nozzles, one for solid stream and the other for throwing a fine mist spray. The mist-spraying nozzle is fitted with a screen to prevent clogging.

Price, complete, \$5.00



AUTO-POP



AUTO-SPRAY

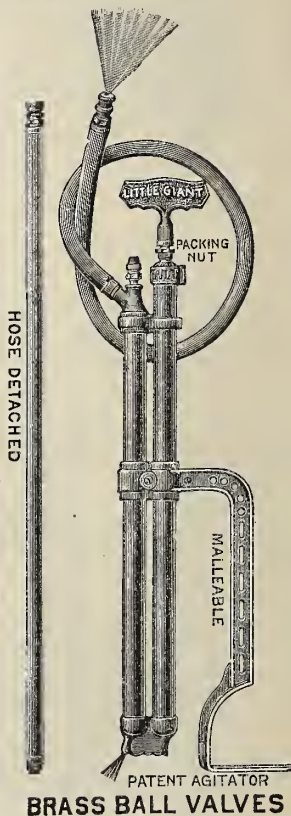


BRASS-ELBOW

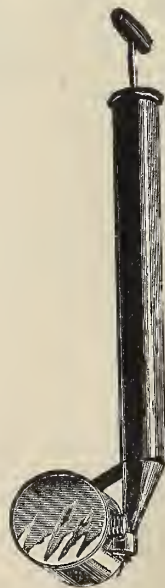
This is a good quality sprayer, made of heavy brass tubing, has brass ball valves, is double acting. Two sizes of nozzles, 3 ft. of good hose. Patent agitator.

For any kind of spraying or white-washing this pump excels.

Price, \$6.00



FAULTLESS TIN SPRAYER.



Made of good quality tin; useful for spraying chicken houses, plants, etc.

One quart\$0.50
One pint35

B-D SIFTER

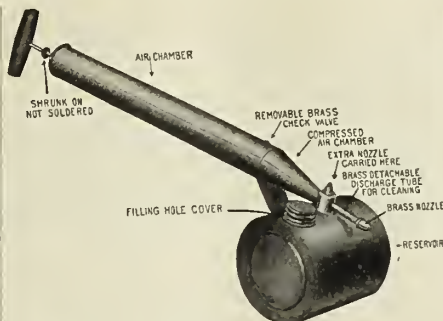
This is an ideal sifter for applying Bug Death dry. It is of the very latest pattern, remarkably effective and distinctly economical. Easy to operate, and gives quick covering to all plants and vines requiring a top application. The price of this very useful implement is 75 cents.



ONE-GALLON SPRAYER

Most convenient size compressed-air type sprayer on the market. Tank, 6 1/4" dia. by 8 1/2" high. Two styles.

Price—1-gallon, Brass..... \$6.00
Price, 1-gallon, Galvanized 4.25

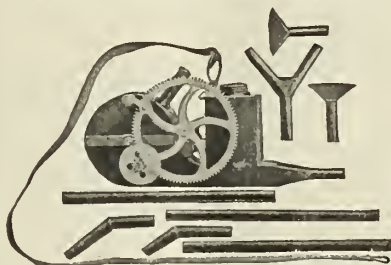


SMITH JR. NO. 1 HAND SPRAY.

Tin, painted red, a continuous fine spray.

Price, \$1.10

SMITH DRY POWDER DUSTER.



Made of heavy tin, nicely painted; hold in reservoir over 1 qt. or 4 lbs. Paris Green; has fan blower; will dust one or two rows fast as operator can walk.

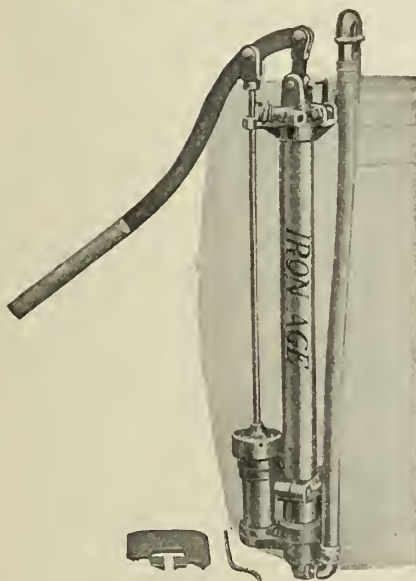
Price, complete, all attachments,.....\$10.00



HUDSON CRESCENT SPRAYER

A strong, practical glass-jar sprayer. Long pump—double tube type. Any quart size Mason jar can be used. Finish, Blue Lacquer.

Jar and Sprayer—Price.....85 cents

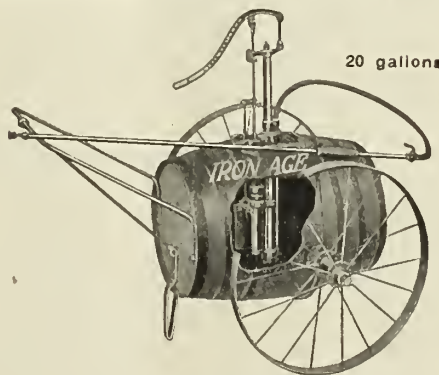


No. 194

No. 194 — VERTICAL BARREL PUMP

Price, \$17.00

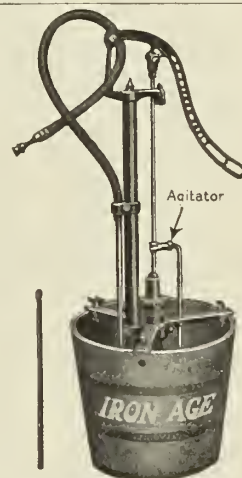
This pump is sold with or without the barrel. Will fit any barrel. Is fastened to the side of the barrel where the most strength is. Has bronze ball valves and bemp packing with lead core, all easily gotten at. 100 pounds pressure maintained with two nozzles. Can be used with one or two leads of hose.



No. 197. Barrel Sprayer.

Price, \$26.50.

No. 97 is simply our bucket sprayer pump set in a barrel and mounted on a truck. Can be removed easily when wanted for use in a bucket. This outfit can be operated by one man. It is recommended for small estates, in public parks, around railroad stations, on chicken farms, etc.



Price, complete, \$15.00.

No. 195. Bucket Sprayer.

Brass pump, bronze ball valves, wick packing—all easy to get at. Pump easily detached if you want to use it in a half barrel. 100 lbs. constant pressure.

DICKEY DUSTER



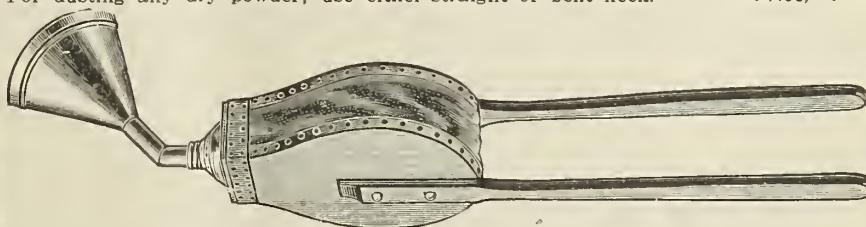
The handy little Bug Death sifter.

Price 40c.

POWDER BELLOWS

For dusting any dry powder; use either straight or bent neck.

Price, \$1.75



Spray Calendar and Formulas

We give below, in short concise form, the principal diseases and remedies for various trees, fruits, and shrubs. The information is necessarily limited, but we can send catalogue more complete on request.

Insects are both biting and sucking. The first eat leaves and plants and can generally be controlled by poisons such as Arsenicals. Sucking insects can only be destroyed through the use of contact sprays, which close the breathing pores.

BITING INSECTS—Best controlled with 2 lbs. Arsenate of Lead paste to 50 gallons water. Asparagus Beetles, Bean Leaf Beetles, Spring Canker Worms, Caterpillars, Codling Moth, Curculio, Flea Beetles, Cherry Fruit Fly, Currant Worms, Locusts, Grasshoppers, Tomato Worms.

BITING INSECTS—Best controlled with Paris Green, Dry Arsenate of Lead, either dry or sprayed. We also recommend Tuber Tonic for Potato Bugs. Potato Bugs, Tobacco Worms.

SUCKING INSECTS—Fish Oil Soap sprayed 20 to 50 parts water is effective on Aphis, some Scale Insects, Cabbage Flea Beetles, Chinch Bugs, Bark Lice.

ANTS—Make holes by driving a stake down six inches deep, then pour in about a tablespoonful of Bisulphide of Carbon. Ants on rose bushes and chrysanthemums are not doing any harm to the plant. They are usually going after Aphis, which they milk. The Aphis should be destroyed.

APPLE—San Jose Scale, Oyster Shell Scale—Use Lime-Sulphur Solution one gallon to ten gallons of water in the Fall or Winter, preferably in the Fall; if badly infested apply twice. Apple Scab, Bud Moth, Curculio and Canker Worm—Spray with Lime-Sulphur one gallon to 40 gallons of water and add two to three pounds of Arsenate of Lead to each 50 gallons. Apply when the color shows in the bloom but before the bloom opens. For Codling Moth spray just after the bloom has fallen with Lime-Sulphur one gallon to 40 gallons of water, and add two pounds of Arsenate of Lead to each 50 gallons. The worms enter the apple at the blossom end and each cup must be filled with spray. Do the work thoroughly. Spray again in 40 to 50 days for the second brood of Codling Moths, which appear at this time. If Bitter Rot or Black Rot should show in the orchard, spray with Lime-Sulphur 1 to 40 pounds in 50 gallons of water.

BLACKBERRIES—Anthracnose and Rust. Cut out and burn any diseased canes. Spray with Lime-Sulphur 1 to 40 or with Fungi Bordo.

CHERRY—Forbes or Cherry Scale—Spray with Lime-Sulphur in the Fall and Winter. For Brown Rot spray with Lime-Sulphur 1 gallon to 40 gallons of water, and add two to three pounds of Arsenate of Lead to poison the Curculios. Spray again about ten days after the fruit has set. Slugs often eat the surface of the leaves early in June; spray the trees with Paris Green or Arsenate of Lead.

CHRYSANTHEMUM—Aphis—Use Tobacco Dust or spray with Tobacco Tea very dilute. For Blight use Bordeaux.

CURRENT—Leaf-blight—Apply Sulphate of Copper Solution when injury first appears. After fruit is harvested apply Bordeaux Mixture. Green Currant Worm—Use Arsenate of Lead. Borers—Cut out and burn infested stems early in the Spring.

GOOSEBERRY—Mildew—Before buds break, Bordeaux Mixture. For Worms, dust with Arsenate of Lead.

GRAPES—In the Spring gather and burn all dead wood and dried fruit of the previous season. Spray with Bordeaux Mixture as the buds are swelling. About ten days later spray with Bordeaux. Spray again after the fruit has set and every two weeks until fruit is nearly full grown.

MAPLE—Caterpillars—Collect and burn egg rings in Fall and Winter. If practical, spray Arsenate of Lead after first leaves appear. Borers—Insert wire in holes and kill, or inject Bisulphide of Carbon in the hole and close with putty or sticky clay.

HARDY SHRUBS—Where affected with Blight, use Bordeaux Mixture two or three times in the Spring. For Leaf-

eating insects, Bordeaux Lead. Scale—Lime-Sulphur Solution in Fall or Winter.

SHADE TREES—For Scale insects spray in Fall or Winter with Lime-Sulphur 1 gallon to 10 gallons of water. For Fungous diseases use Lime-Sulphur or Fungi Bordo; add Arsenate of Lead for leaf-eating caterpillars. For Borers use a wire and pole through burrows, or pour Bisulphide of Carbon in the hole and stop up with mud or putty to keep in the fumes.

ONION—Maggot—Destroy the young plants affected as soon as noticed, digging up maggots with the roots. Use Fish Oil Soap in dilution over plants.

PEACH, APRICOT, AND PLUM—For Peach-leaf Curli—Spray in the Spring before the buds open with Lime-Sulphur 1 gallon to 15 gallons of water. For Brown Rot and Peach Scab spray with 1 gallon of Lime-Sulphur to 75 gallons. Spray before bloom opens and again about ten days after it has fallen. Spray again in 30 days with the Lime-Sulphur 1 to 75.

PEAR—Blight—Cut out and burn all affected branches and twigs as soon as the Blight appears; if possible cut about six inches below blighted part. For Pear Scab and Codling Moth spray as recommended for the apple.

QUINCE—If twigs blight, cut out and burn all those affected. Spray with Lime-Sulphur and Arsenate of Lead as for apple after bloom has fallen.

ROSES—Leaf-Curl and Blight—Bordo Lead, apply twice. For Green-fly or Aphis—Arsenate of Lead before the buds form; afterwards Lemon Oil Insecticide or Tobacco Solution. For Slugs—Arsenate of Lead.

STRAWBERRIES—Leaf-blight, Mildew—When growth begins in Spring, Bordo Lead. When first fruits are set, repeat. After fruit is harvested, repeat every two weeks.

TOMATO—Leaf-blight—As soon as disease is discovered, Fungi Bordo; repeat every week or ten days. Rot—Train the vines, giving as much sunlight as possible. Sow seed at different times, so as to have two or three plantings. Pick infested fruit.

SAN JOSE SCALE—This pest is becoming so serious that it behooves every farmer, whether he be a fruit grower or not, to help destroy it. The insect unfortunately is little understood and hardly noticeable until the trees are practically killed. On young twigs and veins of the leaves of trees thickly infested, small spots of a reddish discoloration appear around the scales. On the trunk and branches there is a rough grayish appearance as if it had been coated with dark ashes. These insects multiply so rapidly that it has been estimated at Washington, D. C., that the progeny of a single female would number 3,216,080,400 by Fall if all were to survive. They are transferred from tree to tree by wind, crawling on the feet of birds and in other ways. At first they seemed to confine their efforts in temperate latitudes to stone fruits, but have spread to apple, pear, and other fruit trees, besides oak, maple, and various shade trees, shrubs, and small fruits. When first born the females move around freely from twelve to thirty-six hours, then thrust their beaks into the bark or fruit of the tree and do not move again. The scaly filaments form over it and they procreate about every thirty days in Summer, the last brood living over until Spring. It is imperative that all farmers take up the question of the San Jose Scale. They can be controlled by spraying Lime-Sulphur Solution in the Fall, Winter, and early Spring months while the tree is dormant, 1 gallon to 10 gallons water, and it is best to spray twice. In the Summer this strong solution cannot be used on account of the injury to foliage and fruit, but even weaker solution, 1 gallon to 30 or 40 gallons of water, seems to have beneficial effect.

INSECTICIDES AND FUNGICIDES

Marked * can be sent by Parcel Post at purchaser's expense.

ATLAS WEED-KILLER

Grass and Weed-Killing Chemical

A scientific chemical which kills weeds and grass permanently, quickly, easily, cheaply. Gets down to the deepest root. Kills the weeds for the whole season. Used by thousands of people all over the United States—owners of estates and homes, as well as leading cities and railroads.

1 gallon of Atlas Weed Killer, diluted with 20 gallons of water and applied with an ordinary sprinkler can, will clean up 600 sq. ft.—and keep it free from weeds for the whole season.

A 500 gallon tank wagon with two men will cover about 2½ miles of road 20 feet wide in one day—at an average cost of \$1 per 1000 sq. ft.—including cost of applying. Compare this with costly hand-weeding.

DILUTION

Atlas is the active agent, water merely the distributor; therefore, we recommend water at the ratio of 20 to 1 as ample to thoroughly saturate the soil. 40 or 50 to 1 will have the same effect, but makes unnecessary distribution labor.

*ANT DRIVER—One of the best preparations made to drive all kinds of ants from houses. It is a non-poisonous powder for sprinkling along baseboards of rooms or any place you desire to be kept free from them. Price in sprinkler boxes, 30c.

*The lawn saver. The ant is a very persistent pest. Use Ant-I-Cide which is in powder form in order to protect your lawn from destruction by the ant pest.

Directions on 1 lb. box, price 30c.

Sent by mail at purchaser's expense. Mailing weight, 2 lbs.

ARSENATE OF LEAD (Dry Powder Form)—Being the more popular form of this destroyer, owing to its economical ways of being applied (can be used either as dusting powder or diluted in water.)

Dusting directions, 1 to 2 lbs. per acre.

Diluted in water, 1 lb. to 50 gals.

Price, ½ lb. can, 30c.; 1 lb. can, 55c.; 5 lb. can, \$2.65; 10 lb. can, \$5.00; 25 lb. can, \$10.50.

ARSENATE OF LEAD PASTE—Has attained a wide reputation as a reliable and economical insecticide and is particularly destructive to leaf-eating insects.

It is in paste form and should be sprayed in the proportion of 1 oz. to 1 gallon of water. 1 lb. can, 40c.

ARSENATE OF ZINC (Powder)—A quick-acting adhesive insecticide for Rose Bugs and Beetles on potatoes and other truck crops. ½ lb., 30c.; 1 lb., 55c.; 5 lb., \$2.50.

"Black Leaf 40" is a concentrated solution of nicotine sulphate, is used as a safe and effective spray for plant lice; contains 40 per cent. nicotine by weight; can be combined and applied with other insecticides and fungicides. Per 1 oz. bottle, 25c.; ½ lb., \$1.00; 2 lb., \$3.25; 10 lb., \$13.75.

BORDEAUX (Dry Bordeaux Mixture)—The perfect Dry Bordeaux Mixture Concentrate is a dry powder, no danger of freezing, no freight to pay for water; use 8 lbs. to 50 gal. of water.

Price, ½ lb., 25c.; 1 lb. can, 45c.; 5 lb. can, \$2.00; 10 lb. can, \$3.50.

Barrel prices on application. Write for leaflet describing this preparation.

BORDEAUX ARSENATE LEAD (Paste)—Used for the same purposes as dry powder for spraying against mildew and blight.

Price, 1 lb., 30c.; 5 lbs., \$1.25.

BORDEAUX MIXTURE (Paste)—The supreme remedy against Fungus, Rust and Rot. Five ounce to gallon of water is standard strength. 1 lb., 30c.; 5 lb., \$1.25; 10 lb., \$2.25.

*BUG DEATH—Is a very fine powder, so exceptionally tenacious that it does not wash off. If used when the tender shoots come from the ground you never will be bothered, but even if the bugs and worms have got the upper hand, it is not too late by any means to use Bug Death right now, for it will kill any bug or worm that eats the leaf, blossom, or flower of any plant. It is ideal for use on Potato, Squash, Cucumber, Currant, Gooseberry and Tomato plants and vines; for house plants and "that little vegetable garden" it is unexcelled.

It contains no Arsenic nor Arsenical poison of any name or nature. Does not harm birds, animals or foliage, no matter how freely it is applied. In addition to killing the bugs or germs and preventing blight, it nourishes the plant. 1 lb. cans, 20c.; 3 lb. pkgs., 50c.; 5 lb. pkgs. 70c.; 12½ lb., \$1.40; 100 lb. keg, \$8.50.



Pat. March 16 and Nov. 9, 1897.

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Packages

	Each
1 qt.	.60
½ gal.	1.00
1 "	1.75
2 "	3.25
5 "	7.00
10 "	12.50
25 "	27.50
50 "	47.50

STERLINGWORTH ANT-I-CIDE



STERLINGWORTH CUT WORM KILLER

The Cut Worm helps to make the cost of living higher. Use the

means at hand to destroy this pest and get a good crop from your protected plants.

Directions on 1 lb. sprinkler boxes, 30c.

Sent by mail at purchaser's expense. Mailing weight, 2 lbs.

HELLEBORE—One of the best insecticides for all around garden use. Destroys almost all leaf and flower-eating insects. Can be applied dry or in powder form. Price, ¼ lb., 20c.; ½ lb., 30c.; 1 lb., 55c.

LEMON OIL CO.—Standard Insecticide has been on the market some time and is largely used by florists and nursery-men for destroying plant lice, Scale, Mealy Bug, Spiders, Aphids, Thrips and many other pests. Non-poisonous, odorless and safe. ½ pt. can, 30c.; pt., 50c.; qt., 90c.

LIME-SULPHUR SOLUTION—A liquid preparation. Our brand stays in suspension perfectly; always ready for use. Directions: For destroying Scale, 1 gal. to 8 gals. of water; for destroying Fungus, 1 gal. to 35 gals. Price, 1 qt., 45c.; 2 qts., 75c.; 1 gal., \$1.25; 5 gals., \$3.75; bbl. (50 gals.), \$15.00.

LIME SULPHUR (Dry Powdered)—Reduces the cost of spraying by fighting three different classes of pests and diseases, with the same weapon at the same time.

It is used for the control of San Jose Scale, Oyster Shellback Louse and other Scale Insects; Apple Scab, Peach Leaf Curl and other fungous diseases; Pear Psylla, Leaf Blister Mite and Aphids.

It is put up in air-tight cans, in powder form, and will keep indefinitely. 1 lb. can, 35c.; 5 lb. can, \$1.25; 10 lb. can, \$2.25; 25 lb. can, \$4.00.

PARIS GREEN—The old time Potato Bug destroyer. Use care in applying on account of its burning properties. Use 2 lbs. to 50 gals. of water or 2 lbs. to 100 lbs. of Land Plaster. Can use in same proportions with Limoid instead of Land Plaster. Price, ¼ lb. pkg., 20c.; ½ lb., 35c.; 1 lb., 60c.

SCALECIDE—Used for destruction of San Jose and other scale insects. Spray during the winter or early spring when trees are dormant. Dilute at the rate of 1 gallon SCALECIDE to 20 gallons of water. Per qt., 75c.; \$1.75 per gal.; five gallons, \$7.25.

PYROX—A paste used for all leaf-biting insects. Is really a Bordeaux and Arsenate of Lead mixture. Dilute 1 lb. to 5 gals. water. Price, 1 lb., 45c.; 5 lbs., \$1.90; 10 lbs., \$3.25.

RAJAH—A distinctive disinfectant and deodorizer for destroying flies, moths, mosquitoes, roaches etc. Price, ½ pt., 25c.; pt., 50c.

*SULPHUR (FLOWERS)—Price, 10c. per lb.; 10 lbs., 80c.; 25 lbs., \$1.75.

*SLUG SHOT—One of the old and well known remedies for destroying slugs, currant worms, cabbage worms and all of the soft shelled insects which trouble vegetation. 5 lb. pkg., 50c.; 10 lb. pkg., 95c.

*SULPHUR CANDLES—For fumigating. ¼ lb., can 10c.; ½ lb. can 20c., 1 lb., 30c.

*TOBACCO DUST—Used for dusting delicate plants, especially good for the soft shell pests which infest flowers. Also for all low growing or trailing varieties of vegetables. Price per 1 lb. pkg., 10c.; 5 lb. pkg., 40c.; 10 lb. pkg., 60c. Larger quantities, price on application.

TOBACCO STEMS—Used for fumigating. Also soaked in water makes a spray. Much used by florists upon tender plants. 5 lb. package 25c.; bbl. sack, \$1.15; bale, \$2.00.

*TREE TANGLEFOOT—An absolute safeguard against all creeping insects on trees. Apply with paddle, making a band around the tree 3 in. wide. Vermin can not get over it. 1 lb. can, 50c.; 3 lb. can, \$1.35. See Page 30.

TUBER TONIC (Dry Powder)—A most satisfactory combination of Paris Green and Bordeaux Mixture possessing great adhesive properties and retains all the qualities of Paris Green and Bordeaux without the burning property of Paris Green. Used for destroying Potato Bugs and for any plant or vine troubled with leaf-biting insects. A fine Fungicide also.

Directions: 1½ to 3 lbs. to 50 gallons of water. Price, 1 lb., 60c.; 5 lb. can, \$2.75.

*WHALE OIL SOAP (FISH OIL SOAP)—An old reliable remedy for spraying against scale and other pests. Can be used in varying proportions dissolved in water. ½ lb., 15c.; 1 lb. pkg., 25c.; 5 lb. pkg., \$1.00.

FERTILIZERS

ACID PHOSPHATE (16 per cent)—For all vegetable crops, grains, grass, etc., 5 lb., 20c.; 10 lb., 35c.; 25 lb., 75c.; 50 lb., \$1.20; 100 lb., \$2.00; sack of 200 lb., \$3.50.

ASHES (Domestic Hard Wood)—This article is very rich in Potash (a very scarce article at this time). Excellent for lawns or grass fields, or for mixing with potting soil. Not less than 25 lbs. sold. 25 lb., 75c.; 50 lb., \$1.25; 100 lb., \$2.00; 200 lb., 3.60; 1000 lb., \$15.00; ton, \$25.00.

BONE MEAL (Extra Fine)—This fertilizer we recommend for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed, for the deep rooted shrubbery and where a perfectly safe fertilizer is wanted. 2 lb., 15c.; 5 lb., 35c. 10 lb., 60c.; 25 lb., \$1.25; 50 lb., \$2.25; 100 lb., \$4.25; hag, 200 lb., \$7.50. Apply at rate of 1000 lbs. to an acre.

GENERAL CROP GROWER (Trucker's Favorite)—This is a combination brand of fertilizer containing 1 per cent Ammonia, 8 per cent, Phos. Acid and 1 per cent Potash. A good all around vegetable fertilizer. 5 lb. 25c. 10 lb., 45c.; 25 lb., 90c.; 50 lb., \$1.50; 100 lb., \$2.65; sack of 200 lb., \$4.75.

HUMUS—(See page 6).

HYDRATED LIME—The good qualities of this lime are generally underestimated, rather than exaggerated. Used for correcting sour ground, to

disinfect chicken runs and houses, for whitewashing. Apply one ton per acre. Price, 4 lb., 17c.; 50 lb., \$1.00; 100 lb., \$1.60. Larger lots—price on application.

LAND PLASTER—Very useful for top dressing. Is a good medium for retaining the fluids and ammoniates when mixed with manures. Mixed with Paris Green is used for dusting plants to destroy vermin. 5 lb., 25c.; 25 lb., 50c.; 50 lb., 85c.; 100 lb., \$1.50; 200 lb., \$2.75.

NITRATE OF SODA—A very powerful, but incomplete fertilizer; only recommended to hasten the crop previous to harvesting. Best form to apply is in solution, two or three ounces to one gallon water. 1 lb., 15c.; 5 lb., 60c.; 10 lb., \$1.00; 25 lb., \$2.00; 50 lb., \$3.75; 100 lb., \$7.00.

NITRO GERM—MULFORD'S—See page 4.

SHEEP MANURE (Pulverized)—This natural fertilizer does not need any recommendation. "It shows for itself" wherever used. Is one of the best of natural fertilizers for the truck patch, around flower beds and for the lawn, and it is hard to find its equal. Apply at rate 1200 lbs. per acre. Price—5 lb., 35c.; 10 lb., 60c.; 25 lb., \$1.25; 50 lb., \$1.85; 100 lb., \$3.25; 500 lb., \$12.75; 1000 lbs., \$23.00.

SPHAGNUM MOSS (Dry)—Barrel size, \$1.00; pk., 20c.; bus., 50c.

EGGS FOR HATCHING

We can furnish eggs for hatching from either exhibition or finest utility strains.

Setting of 15 eggs, finest utility..... \$1.95
In lots of 100 eggs, finest utility..... 11.00

Exhibition stock a matter of correspondence.

Guarantee of fertility does not mean every egg must hatch; conditions beyond control prevent such results very often. We assure you, however, 60 per cent. in early settings (January, February and March); 70 per cent. in balance of season. All claims of infertility must be accompanied by affidavit.



BABY CHICKS

From pure bred stock of finest utility strains:

25 Chicks..... \$7.50
50 Chicks..... 13.50
100 Chicks..... 25.00



DON'T GIVE BABY CHICKS COLD WATER.

DON'T OVERFEED CHICKS.

Either of the above will start bowel troubles. Feed liberally, so long as they keep active. Keep their backs warm.

Price subject to market changes.



RED COMB CHICK MASH WITH DRIED BUTTERMILK

NO trace of White Diarrhoea when you feed RED COMB CHICK MASH WITH DRIED BUTTERMILK. The lactic acid bacilli found in the buttermilk builds tissue faster than the bacteria destroys it and eliminates bowel troubles. It is a perfect chick mash that builds bone, tissue, fat and muscle and maintains health.

It is made from Corn Feed Meal, Old Process Oil Meal, Barley Flour, Dried Buttermilk, Alfalfa Meal, Oat Flour, Wheat Middlings and not over 1% Calcium Carbonate and 1/2 of 1% Salt.

Guaranteed Analysis

PROTEIN 16% CARBOHYDRATES 50% CRUDE FIBRE 9% FAT 4%
PRICES ON APPLICATION.

**Reducing
Baby Chick
Mortality**

Baby Chicks are shipped by express or Parcel Post. We use best of care in putting up shipments and all chicks should reach destination safely. We think this the best method of shipping them.

Poultry Business and Who Should Engage In It

Man has a natural desire to own the soil. Herding and agriculture are primary human occupations, and countless ages of practice in these pursuits have bred the habit into instinct.

For the country dweller the matter is simple. The question depends merely upon a choice of the various methods, any of which he may easily adopt. The urbanite finds the difficulty much more serious. Conditions are more complicated and the way not always obvious. What shall he do? How may he indulge the inheritance of desire handed down through ages?

There are two things to consider when deciding to go into poultry raising, whether it is to be for pleasure or for profit, as the conditions differ according to the branch followed.

Those who engage in it for pleasure are usually the head of the family, who wishes to be supplied with fresh eggs and poultry of his own production, thus assuring himself of the freshness of the products eaten; or one who delights in the appearance of fine fowls and grow them for pleasure of seeing pure bred birds in his yard and blue ribbon premiums as the result of his labors; or it may be some member of the family, perhaps a semi-invalid, to whom the light exercise and the being out in the open air which poultry keeping induces, will be beneficial; or some of the younger members of the family whose fancies run that way, or who have been interested to keep them out of mischief and to teach them industrious habits and the love of animal life which daily care of poultry requires.

Many young boys and girls on the farm or those in villages and towns may profitably engage in poultry raising. The extras, such as bicycles, fishing tackle, rifle or money for a vacation trip for the boys and extras for the girls, for which they do not feel like calling upon their parents, may be easily earned in spare moments, as well as a goodly addition to the bank account, which so many of our American boys and girls possess.

Those who engage in this industry for profit are men who have worked hard in shops, factories and offices, and having saved enough from their earnings, feel in a position to buy a small place in the suburbs of a large city or near a good sized busy town; or young men to whom the out-of-door life appeals and who feel that there is a better opportunity in this than in other lines, and engage in the raising of poultry for a living, combining it with small fruits like strawberries and raspberries, etc., and perhaps flowers or the furnishing of garden plants such as tomatoes, cabbage, cauliflower or celery to those in towns who have back yard gardens.

To women also this industry offers a good opening. The work is not hard, the chicks seem to respond unusually well to a woman's care, and taken in connection with floriculture it is very profitable. There are many women who are making a nice income from their poultry whether handled in connection with their household duties, as do many farmers' wives or as a business, taking practically all of their time, assigning to some other members of the family the work within doors.

With the present improvements in incubators and brooders and feed boxes, drinking founts, coops and houses, the labor of hatching and raising has been greatly lessened, and to those seeking out-of-door employment, poultry-raising appeals strongly.

To the investor who wishes to equip and run a commercial poultry plant on a large scale and on a practical basis we would say there are many such plants in successful operation in this country.

With a good practical poultryman as manager or superintendent, one who understands the management of help as well as the care and management of poultry, such a farm is a good proposition. The increasing price of eggs and poultry, the demand for a better class of goods and for which first-class hotels and restaurants and also private trade offers a premium over market prices, enables the large farms to place contracts for their entire output at a very satisfactory figure.

Every year adds to the ease in getting out and away from the large centres of population. Improved methods of transportation have given readier access to the land, and modern methods of poultry culture have provided the means to use it advantageously.

Within the last decade both the theory and practice of poultry keeping have undergone a complete change. This change and consequent improvement, while it has revolutionized the methods in use on many of the big poultry plants, have been largely helpful to the owner of a few hens.

Artificial incubation was in its infancy. Incubators were crude in design and poor in construction. Brooders were still more undesirable and results generally far from happy. The temperature of both incubators and brooders went up and down, and the chicks went down and out. Chaos frequently reigned.

Now, as then, wrong methods bring wrong results. There is no doubt, however, that success is now the rule rather than the exception. No one who will give reasonable attention to the primary essentials of poultry culture need fail.

What are the essentials? Briefly, proper house, good tools, good feeds and cleanliness. Of these four only the first and the latter two are necessary for success with small flocks.

Expensive buildings are not desirable.

Take our advice; get land; get hens, and enjoy life. The way is easy, and the result is good.

MEMORANDA

INDEX

	Page		Page		Page
Alfalfa	1	Grass Seeds	1, 2, 5	Plant Tubs	32
Alfalfa Cut	33	Grass Shears	45	Plows	41, 42, 43
Alfalfa Meal	33	Grass Hooks	44	Pop Corn	14
Alsike	1	Grass Catchers	31	Post Hole Digger	44
Ant Driver	52	Grafting Wax	47	Pot Labels	31
Arsenate of Lead	52	Green Grass	2	Pots, Paper	31
Asparagus	7	Grit	33	Pots, Earthen	32
Asparagus Knives	46	Grinding Mills	40	Potatoes	20
Asparagus Tape	46	Grist Mills	40	Potato Drags	45
Asparagus Twine	46	Grub Hoes	44	Poultry Business	54
Axes	47	Hand Plows	44	Poultry Feeds	33, 53
Baby Chicks	53	Hard Fescue	2	Powder Guns	50
Bag Balm	34	Hatching Eggs	53	Pratt's Remedies	35
Barley	2, 33	Hedge Shears	44	Protecting Cloth	37
Beans (Garden)	7, 8, 9	Hellebore	52	Pruners	45
Beans (Soja)	3	Hemp	3, 33, 34	Pumpkins	20
Beets	9, 10	Herbs	24	Punches, Poultry	40
Bellows	50	Herd or Red Top	2	Puppy Biscuits	34
Bird Food	34	Hoes	45	Pyrox	52
Bleeding Heart Roots	28	Hoof Packing	34	Radish	20-21
Blue Grass	1	Hoof Softener	34	Rakes	45
Bone, Granulated	33	Horse Comfort	34	Rape, Bird	34
Bone Cutter	40	Horse Radish Roots	15	Rape, Dwarf Essex	3, 33
Bone Meal	53	Horse Tonic	34	Rat Corn	47
Bordeaux Mixture	52	Hose, Rubber	30	Rat Traps	47
Bordeaux Lead	37	Hose Couplings	30	Red Clover	1
Brooder Felt	36	Hose Bands	30	Red Fescue Grass	2
Brooder Stoves	2	Hose Menders	30	Remedies	34
Broom Corn	9	Hose Reel	32	Rhode Island Bent Grass	2
Brussels Sprouts	49, 50	Hotbed Cloth	45	Rhubarb Roots	21
Bucket Pumps	2, 33	Hovers	36	Rice	33
Buckwheat	52	Humus	6, 52	Rollers, Lawn	30
Bug Death	48	Hydrant Attachments	30	Root Cutters	40
Butter Churns	48	Hygrometers	37	Roup Remedy	34
Butter Prints	48	Incubator	36	Rubber Hose	30
Caladimus	28	Insecticides	52	Ruta Bagas	23
Cabbage	10, 11	Iron Age Tools	42, 44	Rye	3
Cabbage Plants	11	Italian Rye Grass	2	Salsify	21
Canada Peas	3, 33	Kafir Corn	3, 33	Salt, Cat	33
Canary Seed	34	Kale	15	Sand	34
Cannas	26, 27	Killing Knives	40	Saucers, Earthen	32
Cantaloupe	16	Kobl-Rabi	15	Saucers, Rubber	31
Caponizing Sets	40	Kow Kure	34	Scratch Feed	33
Carrots	11	Kraut Cutters	46	Scythes	46
Cauliflower	12	Land Plaster	53	Scythe Stones	45
Celery	12	Lawn Mowers	29	Seed Drill	48
Celery Plants	12	Lawn Grass	4	Seed Sower	48
Charcoal	33	Lawn Rollers	30	Shady Lawn Grass	4
Chicks, Baby	53	Lawn Sprinklers	32	Sheep's Fescue Grass	2
Chick Manna	53	Lawn Trimmer	31	Sheep Manure	53
Chick Feed	33, 36	Leek	15	Sidewalk Cleaners	45
Cider Mills	48	Leg Bands	40	Slaw Cutters	46
Cider Presses	48	Lemon Oil	52	Slug Shot	52
Clovers	1	Lettuce	15, 16	Soluble Sulphur	52
Corn, Cracked	33	Lettuce Plants	15	Soja Beans	3
Corn Field	13	Lettuce, Bird	34	Sorghum	3
Corn Flint	33	Lice Killer	34	Spades	48
Corn Knives	46	Limeoid	53	Spading Forks	44
Corn Planters	46	Lime Sulphur	52	Spaghnum Moss	53
Corn Poppers	14	Linseed Meal	33	Spinach	21, 22
Corn Salad	14	Lopping Shears	47	Sprayers	49, 50
Corn Shellers	46	Madeira Vine	28	Spray Calendar	51
Corn, Sugar	13	Manure Drags	45	Spray Nozzles	49
Couplings, Hose	30	Mash Hoppers	39	Sprayer Rubber	31
Cow Peas	3	Mattocks	44	Sprinklers	32
Creeping Bent Grass	1	Maw Seed	34	Squash	22
Cress	14	Meat Mash	33	Stakes	31
Crimson Clover	1	Meat Scraps	33	Sudan Grass	2
Cucumber	14	Measures, Cedar	48	Sulphur Candles	52
Cultivators	41, 42, 43, 44	Melons	16	Sunflower	33, 34
Cuttle Bone	34	Mexican Vines	28	Tanglefoot	31
Dahlias	27, 28	Millets	2, 33, 34	Tar	34
Dandelion Pullers	46	Mole Traps	47	Thermometers	37
Dibbles	44	Mulford's Cultures	4	Thermostats	37
Diseased Land	24	Mushroom Spawn	17	Timothy	1
Dog Biscuit	34	Mustard	16, 33	Tobacco	22
Dusters	50	Nasturtium	17	Tobacco Dust	52
Egg Boxes	37	Nest Eggs	37	Tobacco Stems	23, 51
Egg Crates	37	Nests, Hen's	39	Toe Markers	40
Egg Hatching	53	Nitrate of Soda	53	Tomatoes	22, 23
Egg Testers	37	Nitrogerm	4	Tomato Plants	23
Egg Plants	14	Nozzles	30, 45	Trap Nest Fronts	39
Egg Plant Plants	15	Nursery Stock	24	Tree Pruners	47
Embankment Grass	1, 4	Oat Spouters	40	Tree Tanglefoot	52
Endive	15	Oats	3, 32	Trellises	32
Feeders	33, 39, 40	Oil Lawn Mower	30	Trowels	44
Fertilizers	53	Okra	17	Tuberoses	28
Field and Forage	2	Onions	17	Tubs	32
Fish Oil Soap	53	Onion Sets	18	Tuber Tonic	53
Flax	3, 33	Orchard Grass	2	Turf Edgers	44
Flower Seeds	25, 26	Oyster Shell	33	Turnip	23
Fly Spray	34	Paeonies	28	Vetch	3, 33
Fodder Cutters	48	Panacea	34	Vine Cutters	44
Forks	45	Parcel Post Rates	53	Water Glass	37
Fount Heaters	38	Paris Green	52	Watermelon	16
Fountains	37, 38	Parsley	18	Weed Killer	46, 52
Fruit Grinders	48	Parsnip	18	Weeders	44, 45
Fruit Pickers	46	Pasture Grass	2	Whale Oil Soap	52
Fungicides	52	Peas	18, 19	Wheat	3, 33
Garden Tools	44, 45	Pebbles	34	Wheelbarrows	43
Garden Plows	43	Pepper	19	White Dutch Clover	1
Garden Sets	44	Pepper Plants	19	White Sweet Clover	1
Garden Spades	48	Perennial Rye Grass	2	Wine Mills	48
Garget Cure	34	Pigeon Feed	33	Wine Presses	48
Gladiolus	28	Pigeon Nest Bowls	37	Wood Ashes	53
Gloves	48	Planet Jr. Tools	41	Yellow Blossom Clover	1
Gluten Meal	33	Planting Tables	5, 6		
Golf Grass	4	Plant Stakes	31		
		Plant Lice Killer	52		

